federal register

MONDAY, NOVEMBER 12, 1973

WASHINGTON, D.C.

Volume 38 ■ Number 217

PART II

ENVIRONMENTAL PROTECTION AGENCY

■

AIR PROGRAMS; APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

California Transportation Control Plan

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER C—AIR PROGRAMS

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

California Transportation Control Plan

This notice of final rulemaking sets forth transportation control plans for the following California Intrastate Air Quality Control Regions (AQCR) (hereafter referred to also as Regions): San Francisco Bay Area, Sacramento Valley, San Diego, San Joaquin Valley, and Metropolitan Los Angeles. A General Preamble was published on November 6, 1973, and is part of this rulemaking.

BACKGROUND

On March 20, 1973, by publication in the FEDERAL REGISTER (38 FR 7325), the Administrator, acting in response to a court order, notified the Governor of California that a transportation control plan should be submitted by April 15, 1973, for the first four of the five regions mentioned above.

The Los Angeles Metropolitan Intrastate Region was already the subject of a separate Court order. There, the U.S. District Court for the Central District of California ordered on November 16, 1972, that EPA propose a transportation control plan for the Los Angeles AQCR by January 15, 1973. This proposed plan appeared in the January 22, 1973, FEDERAL REGISTER (38 FR 2194) with minor corrections published on February 7, (38 FR 3526).

Extensive public hearings were held on the plan throughout the AQCR. The proposal was later revised to make it consistent with the transportation control plans developed for the other Regions. This revised proposal appeared in the July 2, 1973, FEDERAL REGISTER (38 FR 17683) and was the subject of a public hearing on August 9–10, 1973.

California did not submit a transportation control plan by the Court-ordered deadline for the other four Regions and accordingly EPA was forced to propose substitute regulations for the San Francisco Bay Area, Sacramento Valley, San Diego, and San Joaquin Valley Intrastate Air Quality Control Regions, 38 FR 18948 (July 16, 1973). These regulations were the subject of public hearings in each of the affected Regions on August 6–10, 1973. No regulations were proposed for the Southeast Desert because the air pollution there comes almost entirely from the Los Angeles Region.

The transcripts of all public hearings are available for inspection at the Federal Information Center, 300 North Los Angeles Street, Room 1011, Los Angeles, California 90012; the U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California 94111; and the U.S. Environmental Protection Agency, Office of Public Affairs, Room W 311, 401 M Street SW., Washington, D.C. 20460.

The plans promulgated today have, to the maximum extent possible, been drafted to reflect the expressed preference of the State of California and the affected local jurisdictions.

California Implementation Plan, Revision 3. The Governor of California submitted Revision 3 of the California State Implementation Plan (SIP) to the EPA by letter dated July 25, 1973; it was received by the Region IX Office for the Administrator on August 2, 1973. This revision included the State's plans for transportation controls as well as a general revision to many rules and regulations pertaining to stationary sources. On September 21, 1973, the Administrator acknowledged receipt of the SIP revision in the FEDERAL REGISTER (38 FR 26462) and solicited public comment on that Plan. The notice gave the public 21 days (until October 12, 1973) to submit comments to the Administrator on the revised State plan. Based upon EPA's review of the Plan and a review of all relevant public comments, the Administrator will revise the approval/disapproval notice of the original implementation plan, published on June 22, 1973, in the FEDERAL REGISTER and rescind any EPA regulations that are deemed unnecessary based upon the State submittal.

Although the Administrator cannot make any final determination of the acceptability of the recently submitted State plan until all public comments have been evaluated, some tentative observations can be made.

The State Implementation Plan Revision 3 does not provide for attainment of the photochemical oxidant standard in the Los Angeles AQCR, nor is a strategy presented for attainment. The State Plan proposes the retrofitting of catalysts to automobiles and trucks in the San Francisco Bay Area AQCR; the EPA concurs with this strategy. The State Plan assumes a 95 percent reduction in aircraft emissions by 1977. The EPA believes that this reduction is not attainable without a significant reduction in the number of flights, and such a reduction is not feasible at this time. The State Plan endorses gasoline marketing controls to prevent gasoline vapor losses; the EPA also endorses such controls. The State Plan relies upon local transportation agencies, such as the San Francisco Bay Area's Metropolitan Transportation Commission, to develop and implement improvements in mass transit. The EPA endorses this approach, but requires that the improvements be spelled out in regulatory form. The State does not in all cases utilize the most recent air quality data; an example is San Francisco. For instance, more recent data for San Francisco suggest that emission reductions must be greater than those shown in the State Plan, and these data have been used in this promulgation.

Copies of the Environmental Protection Agency's testimony on the State Implementation Plan Revision 3 given at the State hearings on said Plan are available from the EPA Region IX Office in San Francisco. Inquiries should be directed to the Regional Counsel, EPA Region IX, 100 California Street, San Francisco, California 94111.

SUMMARY

A significant reduction of reactive hydrocarbons will have to occur in all regions covered by this promulgation if the ambient air quality standard for photochemical oxidants is to be attained. In all cases, the controls promulgated will effect the required reduction in reactive hydrocarbons; attainment and maintenance of the oxidant standards will ensure attainment and maintenance of the carbon monoxide and nitrogen oxide standards as well.

The promulgated control measures reflect what EPA considers to be the most feasible approach for meeting the national standards in each region. However, these measures are subject to change subsequent to further study conducted by EPA and others.

Much of the reduction in photochemical oxidant levels will result from measures submitted by the State and already approved, but these measures are not enough to meet the standards. The Administrator has concluded that an extension of the deadline for achieving the standards to 1977 under section 110(e) of the Act is justified because the necessary technology or other alternatives are not available and will not be available soon enough to permit full compliance before 1977. The extension applies to all Regions covered by this promulgation for photochemical oxidants and for carbon monoxide. In reaching this conclusion, the Agency has considered, and applied as part of its plan, reasonably available alternative means of attaining the primary standard.

The plan set forth herein provides for the application of its requirements to most emission sources other than motor vehicles not later than June 1975, as required by section 110(e)(2)(A) of the Clean Air Act, and provides for the application of reasonable interim measures for control of motor vehicle emissions as soon as they can reasonably be put into effect.

Most of the plan utilizes reasonable and apparently available means of reducing photochemical oxidants, carbon monoxide, and nitrogen dioxide. These measures include review of all new parking facilities with more than 50 spaces to determine their air quality impact; fees to increase parking costs at existing facilities; a ban on motorcycle use if stringent emission standards for new motorcycles are not established; and mandatory inspection and maintenance of light-duty vehicles (including light-duty trucks). In addition, bus-carpool lanes or other bus and carpool preference systems will be set up on selected major streets and highways, carpooling systems will be established in all Regions covered by this rulemaking, and employers who provide more than 70 employee parking spaces will have to take stringent steps to discourage single-passenger car commuting by their employees.

Retrofits of catalysts by 1977 and vacuum spark advance disconnect (VSAD)

devices on some existing light-duty vehicles upon change of ownership will also be required.

Each of the measures discussed above will be applied as soon as it is reasonably available. However, in many cases implementation will not be practicable by 1975 due either to the present unavailability of the necessary equipment, to the administrative problems involved in setting up the necessary regulatory mechanisms, or to the need to phase in the measures so that the public can adjust to them. Accordingly, as noted above, extensions until 1977 in the time for achieving the standards have been granted to each of the Regions for which plans are being promulgated today.

Even if all the reasonable measures mentioned above are imposed on the timetable indicated (see Table 1), it is estimated that the national standards for photochemical oxidants will not be met in the Regions by 1977. Under the Clean Air Act, the Agency has no choice but to include in the plan a measure that can achieve the standards by 1977. Consequently, gasoline sales limitations of whatever degree necessary have been included for 1977. If implemented, this would achieve the standards for both photochemical oxidants and carbon monoxide. However, the Agency will utilize every means available to avoid the need to impose severe gasoline rationing to reach that goal by 1977.

TABLE 1.—APPLICABILITY OF EPA CONTROL STRATEGIES FOR CALIFORNIA

Control measures	Regions				
	Los Angeles	San Francisco Bay Area	San Diego	Sacramento Valley	San Joaquin Valley
I. Stationary source:					
a. Vapor recovery at service stations	X [4]	S	S	X [4]	X [4]
b. Organic solvents usage	S	X	S [1]	X	X
c. Control of degreasing operations	X	X	X	X	X
d. Dry cleaning solvent vapor losses	X	X	X	X	X
e. Metal surface coating thinner and reducer	X	X	X	X	X
II. Mobile sources:					
a. Catalyst retrofit (1966-74), LDV and MDV	X [4]	X [4]	X	X	X
b. Vacuum Spark Advance Disconnect (1955-65)	S	S	S	X	X
c. Inspection/Maintenance (loaded)	X [4]	X [4]	X [4]	X [4]	X [4]
d. Motorcycle limitations [2]					
III. VMT Reduction measures:					
a. Exclusive bus/carpool lanes	X [5]	X	X [5]	X [5,1]	X [5]
b. Bus/carpool matching	X [4]	X	X [4]	X [4]	X [4]
c. Parking supply management	X	X	X [6]	X	X
d. Mass Transit incentives for employees	X [5]	X [4]	X [5]	X	X
e. Parking surcharge	X [5]	X	X		
f. VMT/air quality improvement monitoring program	X	X	X	X	X

Note: All AQCR's require O_x/CO extension to 1977.

X=EPA plan.
S=Included in approved State plan.
[1] =Additional regulations are being promulgated.
[2] =Limit only if new motorcycle emission standards not promulgated.
[3] =Require study and specific recommendations by State.
[4] =Included in State-submitted plans.
[5] =Recommended by State and local task force as VMT-reduction measure.

Summary of original proposal. Below is a summary of the controls proposed in the July 2 and July 16, 1973, FEDERAL REGISTERS for the affected Regions.

1. *Catalyst retrofit.* All automobiles in the San Diego, San Francisco, Metropolitan Los Angeles, Sacramento Valley, and San Joaquin Valley AQCR's, of model years 1966 through 1974, and capable of performing adequately on non-leaded 91 research octane number gasoline (approximately 75 percent of 1971 through 1974 model year cars and 20 percent of 1966 through 1970 model years) were to be equipped with a catalytic muffler. The cost of this device is estimated at $150 per car.

2. *Vacuum spark advance disconnect.* Automobiles of 1955 through 1965 model years in the Sacramento and San Joaquin Valley AQCR's would have been retrofitted upon change of ownership. The cost would be approximately $35. In the other critical AQCR's covered by this promulgation, the law currently requires the installation of such devices.

3. *Bus and carpool lanes.* In all AQCR's at least one lane for the exclusive use of buses and carpools was to have been provided on all 3- and 4-lane highways parking facilities would have been required to reduce capacity by 20 percent.

5. *New Parking facilities review.* All new parking facilities, public or private, were to have been reviewed for their impact on air quality before construction.

6. *Computerized carpooling service.* Under this proposal, the State would have to set up a computerized carpool matching system for application in the appropriate AQCR's.

7. *Limitation on gasoline sales.* Gasoline consumption in recent years has grown at a rate of about 4 percent per year. Under this proposal, sales in future years would have been limited to the amount sold in a 1972–1973 12-month period.

8. *Motorcycle controls.* This proposal would have limited the registration (and therefore growth in total number) of motorcycles, as well as placing an operating ban on motorcycles during certain hours of the day during the "smog season."

9. *Inspection and maintenance.* Under this proposal, the State was to operate a network of inspection stations to detect and minimize the number of improperly adjusted or defective automobiles. Each vehicle was to be inspected yearly and maintenance performed on failing vehicles to minimize emissions.

10. *Stationary source controls.* These regulations included installation of vapor recovery systems at gasoline stations, additional controls on dry cleaning emissions, elimination of certain industrial solvent compounds, improved control on painting operation solvent loss, and additional restrictions on the loss of organic solvents in general industrial use.

SUMMARY OF PUBLIC COMMENTS

EPA held public hearings on its transportation control proposals in each affected AQCR, and these hearings were well attended. EPA was impressed with the quality, breadth, and detail of the testimony received and has attempted to modify its plan in response to public comments where possible. Comments were received both on specific technical controls and on broad public policy issues.

Economic incentives and disincentives. Many witnesses testified on the subject of emission "taxes", expressing the belief that economic incentives and disincentives might reduce vehicle miles traveled (VMT) more effectively than other measures, and, as a bonus, produce revenue that could be used for mass transit. In general, the schemes presented would either: (1) Surcharge gasoline sales heavily; (2) surcharge some features of the automobile related to its gasoline consumption level, such as weight, displacement, or number of cylinders; or (3) surcharge facilities that serve the automobile, such as parking. The revenue raised by these taxes or charges would be used to improve mass transit and/or subsidize the retrofitting of cars with emission control devices. The City of Los Angeles strongly urged the use of parking fees to discourage unnecessary driving; it was estimated that a charge of only 50 cents per hour of parking time applied in the Los Angeles central business district (CBD) would raise over $10 million a year, or enough to put some 110 to 120 buses on the road. Many urged the adoption of schemes that both discourage driving and raise revenue, since it was stated repeatedly at the hearings that the public would only accept restrictions on driving if it sees a feasible mass transit system being put into operation at the same time. Surcharge schemes, properly applied, can accomplish both objectives.

It was emphasized, however, that any scheme to surcharge parking must extend beyond the urban cores, in order to keep core areas competitive with outlying employment and shopping centers. If only CBD parking is charged, people may go where the parking is cheaper or free, further contributing to the decay of the central city. Witnesses also pointed out that parking charges to be effective must be applied to private as well as public parking.

Standards and attainment date. Significant controversy arose over two particular requirements under the Clean Air Act. The questions concerned: (1)

Whether the National Ambient Air Quality Standard (NAAQS) for oxidant of 0.08 parts per million (ppm) for a 1-hour averaging time is an appropriate standard; and (2) if a socially disruptive measure such as extensive gasoline rationing is required to meet the NAAQS's for oxidant and carbon monoxide by 1977, whether the attainment date should be delayed beyond 1977.

The EPA, as required by the Clean Air Act, continuously reviews the medical basis for the NAAQS's. It is the Administrator's determination that to comply with the meaning of the Clean Air Act—that is, to protect public health with an adequate margin of safety—the 0.08 ppm standard for photochemical oxidant is a sound standard.

With regard to the second question, it is not within the authority of the EPA at the time of promulgation of this plan to extend attainment of the NAAQS's beyond 1977. The Clean Air Act specifically provides for no major form of transportation, are unduly wasteful of land, energy, and other resources, and have contributed to the decay of central cities. Comprehensive land use planning that takes air quality into account can eliminate the need for many such controls through placement of sources, proximity of employment and residential centers, and provision for mass transit and other measures.

Regulations that require land-use planning tied to air quality considerations were recently promulgated by EPA in response to a court order (38 FR 15834, June 18, 1973). These "indirect source" guidelines required each State to submit to EPA appropriate review procedures, both long term and short term, to ensure the maintenance of the NAAQS in the future. The State of California has not submitted such review procedures to the EPA, although it is developing them. The Administrator has, therefore, proposed Federal regulations for the review of "indirect sources." These regulations will require the review for effect on air quality of all new large parking facilities, highways, airports, housing developments, and other development and/or construction that may increase automobile emissions because of increased vehicular travel.

The State of California Air Resources Board, under the direction of State Senate Bill 981, is developing an indirect source review procedure. The EPA believes that the review of indirect sources should be at the State and local level. Consequently, when the State submits an approvable procedure, the EPA will rescind any duplicating EPA regulations.

Review of new highway construction. Many comments were received on the continued construction of new highways. Urban sprawl is often precipitated by significant highway construction. Section 109(j) of the Federal Aid Highway Act, as amended, 23 U.S.C. 109(j), requires that any new Federally aided highways must be consistent with applicable implementation plans under the Clean Air Act. The "indirect sources" regulations or the State measures that may be approved in their place will be integral parts of these implementation plans. Such regulations would not be consistent with the requirements of the statute or the court order if they were interpreted to allow construction of major new freeways in heavily polluted urban areas, such as the Century Freeway in Los Angeles.

EPA also reviews and comments on new highway aid projects as part of its review of environmental impact statements under the National Environmental Policy Act (NEPA). 42 U.S.C. 4321–4347.

Aircraft emissions. Testimony at every hearing urged some additional controls on emissions from aircraft. Some witnesses, including the California State Air Resources Board, believed that aircraft should be required to reduce emissions by the same amount as automobiles. Witnesses also suggested that if safety factors prevent this amount of emission reduction, that controls be placed on the operation of aircraft. Since restrictions are being placed on the operation of automobiles and possibly motorcycles, witnesses stated that equity considerations justified extending operational controls to aircraft: They suggested that this could be done through changing schedules to permit only full or nearly full planes to take off.

Aircraft emissions represent a significant portion of present emissions, and will become increasingly important as automobile-emitted pollutants decrease. The original transportation control proposal stated that emissions from aircraft engines in 1977 were expected to be somewhat less than the emissions projected by using current emission factors (EPA promulgated aircraft emission regulations in the July 17, 1973, FEDERAL REGISTER (38 FR 19088)). This reduction is due to lower-emission engines that are expected to replace and supplement engines presently in use. Although a reduction is anticipated, the emissions from aircraft are still quite significant. For example, aircraft emissions in San Francisco are projected to account for 34 tons/day of reactive hydrocarbons in 1977. Total allowable emissions of reactive hydrocarbons from all sources must be less than 125 tons/day if the national standard for oxidants is to be achieved. This plan will reduce emissions to 198 tons/day without gasoline rationing. Aircraft emissions, therefore, will account for 17 percent of the anticipated emissions in 1977.

The EPA believes that the aircraft industry and airlines should continue to promote and, if possible, accelerate the development of engines with lower emission rates, and investigate the possibility of modifying current in-use aircraft engines to reduce emissions. The EPA will continue to assess the feasibility of such controls, and work closely with the Federal Aviation Administration (FAA).

Further reductions in aircraft emissions beyond those that currently effective Federal regulations will provide may be possible through a variety of means. First, EPA has under study the possibility of controlling ground operations at major airports in order to reduce emissions from taxiing airplanes (37 FR 26502, December 12, 1972). Second, portions of the legislative history of the Clean Air Act Amendments of 1970 support the position that States, as part of their implementation plans, can both control such ground operations and also limit the number of flights to given airports. A limitation on the number of flights by a local government acting in its proprietary capacity as the owner of an airport would also appear proper. See City of Burbank v. Lockheed Air Terminal, Inc., 93 S. Ct. 1854 (1973).

Bicycle usage. America is experiencing an unprecedented boom in bicycle sales and usage. In 1972 bicycles outsold automobiles, 13 million to 11 million. Bicycle use has doubled in the last 10 years, to approximately 80 million users now.

A preliminary analysis by EPA suggests that increased use of bicycles in urban commuting could reduce auto vehicle miles traveled by as much as 3 percent in areas particularly amenable to bicycle travel.

Public comment received concerning bicycle usage indicated a growing enthusiasm for using the bicycle as a form of transportation particularly suitable for use in commuting to park-and-ride facilities (such as BART stations in the San Francisco Bay Area). The major disincentives to cycling are: High accident rates, exposure to auto pollutants, high bicycle theft rates, and insufficient support facilities. The latter problem tends to cause the previous three.

Such problems could be greatly reduced through better support facilities, segregated bikeways and secure parking arrangements. In addition, such facilities would further promote bicycle usage by improving the convenience of this mode of transportation. Indeed, the ultimate development would be to integrate the bicycle mode with mass transit through parking facilities designed to provide a "feeder" function.

Since 1971, the Department of Transportation (DOT) has been the leader in promoting bicycle use. DOT has allowed States to fund bikeways along federally funded roads using trust fund monies.

In terms of new legislation, the most promising development is the latest amendment of the Federal Aid to Highways Act of 1973 (Pub. L. 93–87). The bikeway section of the Act authorizes $120 million of trust fund monies to be used for bikeway construction over the next 3 years.

The EPA supports vigorous State and local programs providing for the safe and efficient use of bicycles.

Air quality baseline. Testimony was received relative to the method of calculating the emission reductions necessary for attainment of the photochemical oxidant standard. In response to that testimony, the EPA has developed a substantiating methodology which validated the amount of emission reductions necessary. A discussion of this method, titled "Methodology for Determining the Base Year Oxidant Level" will be available

shortly from the EPA Region IX office. The resultant calculations based on 3 years (1969–1971) of hourly oxidant data from several locations in each AQCR, showed that the statistically based values varied not more than 0.03 ppm from the maximum values used as the air quality baseline (plus or minus 8 percent). Thus, no substantial change has occurred in the air quality improvement that is necessary. Table 2 compares these statistically based values with the design values used in the plan.

TABLE 2.—COMPARISON OF EXPECTED ANNUAL MAXIMUM 1-HOUR OXIDANT CONCENTRATIONS WITH ACTUAL VALUES USED IN ROLLBACK CALCULATIONS (PPM)

Region	Statistically projected (maximum)	Actually observed (maximum)
Metropolitan Los Angeles	0.60	0.62
San Francisco Bay Area	.33	.36
San Diego	.30	.32
Sacramento Valley	.25	.24
San Joaquin Valley	.26	.24

GENERAL DISCUSSION OF THIS PROMULGATION

This section of the Preamble discusses the pollution control measures that are being applied generally in this plan, why they were chosen, and the respects in which they differ from the measures in the proposal. The measures are classified under three headings: "Stationary Source Controls", "Hardware Controls for Vehicles", and "VMT Reduction Measures".

STATIONARY SOURCE CONTROLS

For a variety of reasons, EPA looked first to the reductions in emissions that might be achieved by further control of stationary sources. The states and EPA have had significant experience in enforcing similar measures. It can be predicted with confidence that none of these measures will cause any noticeable economic or social disruption even though some burden on individuals may result from them.

Control of degreasing operations. The control of degreasing operations regulation is changed from the proposed regulation in the July 16, 1973, FEDERAL REGISTER to reflect the need for continued use of certain degreasing solvents. The control approach in this final regulation does not ban any particular degreasing solvent. The regulation instead either requires that the discharge be reduced by 85 percent or else requires that the solvent meet a volume composition requirement; it allows no exemption on the basis of the amount or rate of emissions. This regulation is neither to be construed as allowing any lessening of emission reduction requirements specified in any other EPA or EPA-approved rules, nor as negating certain specified allowances or privileges otherwise allowed in the rules.

Control of dry cleaning solvent vapor losses. The control of dry cleaning solvent vapor losses regulation is changed from a similar proposed regulation in the July 16, 1973, FEDERAL REGISTER. The requirements for vapor removal efficiency and an implementation date now reflect the apparent difficulty encountered in the most likely candidate process for removing the reactive organic vapors encountered in dry cleaning processes. In addition, a volume cut-off point of 4 percent reactive organic material was introduced to allow for tolerances in dry cleaning solvent compositions.

Gasoline marketing controls. The gasoline transfer vapor control regulation and the control of evaporative losses from the filling of vehicular tanks regulation were changed from the proposed regulations in the July 16, 1973, FEDERAL REGISTER to reflect more recent technical considerations and also the testimony received at the EPA hearings on the proposed transportation control plan. EPA technical staff has indicated that, because of equipment development problems, a time extension should be given for the installation of systems for the control of evaporative losses from the filling of vehicular tanks; this determination is reflected in the final regulations. It is also EPA's present position not to require the installation of gasoline vapor adsorption or refrigeration-condensation systems because of present equipment development and supply uncertainties. Therefore, the control efficiency in both Sections was lowered from 95 percent to 90 percent, so that the installation of vapor balance or vapor return systems can meet the requirements of this rule in the short-term and more elaborate systems can be installed at a later date. However, it is the opinion of EPA that adsorption and refrigeration-condensation systems will be developed and readily available in the near future, and for this reason, a provision is made that any vapor balance or vapor return system be amendable to add-on retrofit with an adsorption system, refrigeration-condensation system, or equivalent vapor removal system. These more advanced and sophisticated types of vapor removal systems are being developed by industry primarily as a result of stringent gasoline vapor loss control regulations promulgated by San Diego County and by the San Francisco Bay Area Air Pollution Control District. EPA approves and encourages these stringent control regulations and tactics, and supports such vigorous emission control approaches consistent with technology and development considerations.

Testimony was given to EPA that extreme hardship would occur to certain gasoline distributors if small delivery vehicles and certain bulk terminals were required to retrofit with vapor balance or return systems. Taking this into account, EPA has granted an additional year before such retrofit would be required on delivery vehicle compartments that have capacities of 1,000 gallons or less and also certain bulk terminals so that the problem areas can be further analyzed and documented or resolved.

Organic solvents. The organic solvent usage regulations and the metal surface coating thinner and reducer composition regulations are modifications of the two proposed organic solvent usage regulations found in the July 16, 1973, FEDERAL REGISTER. The implementation date for the 3,000 pound limit restriction in the organic solvent usage regulations has been extended from 1974 to 1976 to reflect the need for lead time required by industry to comply with this restriction. In the high solids and water base incentive portions of the solvent usage rules, an allowance was granted to qualify for exemption presently installed equipment in which solvent comes into contact with flame. The incentive for the use of high solids materials has been liberalized by raising the allowable organic content from 5 percent to 30 percent; this is then lowered to 20 percent in 1977. Two 8-carbon aromatic hydrocarbons (phenyl acetate and methyl benzoate) were deleted from the photochemically reactive classification, reflecting the results of recent reactivity studies and the guidance presented in the August 14 and November 25, 1971, FEDERAL REGISTERS.

The compliance date for requirements for architectural coatings and their use has been extended to January 1, 1975, to allow suppliers and distributors of these coatings to comply in an orderly manner without severe economic penalties. The special control requirements for metal object surface coatings are no longer in the organic solvent usage regulations, but are now found in a modified form in the section entitled "Metal Surface Coating Thinner and Reducer Composition". This section will result in a significant improvement in organic emissions in metal surface coating operations. Representatives of the paint and coatings industry have expressed a willingness to cooperate in reformulating basic paint compositions so that total solvent composition in the paint, when diluted with solvent thinners and reducers for actual metal surface application purposes, will conform to paragraph (k) of § 52.254 so as to be defined as non-photochemically reactive. After some additional study, EPA expects to propose regulations in the near future to effect a lowering in the reactivity of metal surface coating paint and coatings compositions, after dilution with organic thinners and reducers.

During the course of investigating the use and the effect of certain organic solvent usage rules now in effect in the San Diego, Los Angeles, and San Francisco Regions, which are similar to § 52.254, it appeared that certain parts of § 52.254 deserved reconsideration in terms of eliminating organic emission allowances. This became apparent in terms of a present allowance for uncontrolled organic emissions of up to 40 pounds in any day or 8 pounds in any hour from individual sources. This allowance, for instance, resulted in virtually all automobile body paint refinishing-repair operations neither being required to control emissions nor required to use paints whose compositions meet the non-photochemically reactive composition requirements of § 52.254. EPA will contact the State and local air pollution control districts to elicit comment and further insight into the scope of this general problem, with the goal of proposing additional regula-

tions for the control of stationary source organic emissions.

HARDWARE CONTROLS FOR VEHICLE RETROFITS

Comments were received on the feasibility of requiring retrofit emission control devices on existing automobiles. Based on the comments received, the EPA position on retrofits has not changed from the proposed regulations.

Catalytic converters will still be required by 1977 on all light-duty vehicles (which include light-duty trucks) that can run on the octane levels of unleaded gasoline that will be available at that time. Information available to the Administrator indicates that such retrofits are feasible on light-duty trucks and thus a regulation providing for such retrofits is being promulgated.

The California nitrogen oxide, hydrocarbon, and carbon monoxide reduction device program for used cars will be expanded as proposed in the original regulations. Presently available devices basically consist of a controlled vacuum spark advance disconnect. The EPA regulation requires application of the State's present program for 1955 through 1965 model year vehicles to the Sacramento and San Joaquin Regions. The present State program exempts these regions from this retrofit program.

Inspection/maintenance programs. Considerable reductions in motor vehicle emissions can be achieved by requiring all vehicles in an area to be tested annually for emissions, failing those emitting pollutants that exceed a certain level, and requiring maintenance on those that fail in order to bring them into compliance. This process is called "inspection and maintenance" throughout this discussion.

Three different types of tests are possible. The car can be tested while running in gear on a treadmill-like device called a "dynamometer" (a "loaded test"); it can be tested while running in neutral (an "idle test"); or certain emission-related engine components can simply be examined to make sure they are in good working order ("parameter" inspection). A loaded test is the most effective and most expensive; parameter inspection is the least effective and least expensive. Since an inspection and maintenance program cannot be expected to achieve maximum effectiveness in reducing emissions unless a loaded test is adopted, EPA is requiring its adoption.

The State of California is proceeding with an inspection/maintenance system that will result in emission reductions. This plan will require that the State's inspection/maintenance system be expanded to require mandatory inspection and maintenance of all light-duty motor vehicles in Regions covered by this proposal. The inspection and maintenance program recently adopted by the State may be applicable to light-duty vehicles only in the Los Angeles Region. EPA has determined that extension of inspection/maintenance program to light-duty trucks is technically and administratively feasible because they are in many respects similar to light-duty vehicles.

Gaseous fuel usage. Using compressed natural gas (CNG) and liquified petroleum gas (LPG) for the fueling of internal combustion engines significantly reduces the emissions those same engines would produce if gasoline powered. The EPA encourages the use of gaseous fuel, particularly LPG, for fleet vehicles.

The Agency believes that those automobiles unable to run on unleaded gasoline and, therefore, unable to be retrofitted with catalyst exhaust systems, should possibly be converted to gaseous fuels. Because of the distribution problems and the anticipated effectiveness of catalytic mufflers, however, the Agency is not requiring gaseous fuel conversion. Nevertheless, those fleet owners and individual auto owners who have installed such conversion systems before the effective date of the catalyst retrofit program will be exempt from the requirements of that program.

Transit agencies should consider the advantages of gaseous fueling of buses rather than either gasoline or diesel power systems, prior to the purchase of these vehicles.

VMT REDUCTION MEASURES

Motorcycle controls. In the July 16, 1973, proposal, regulations were included that would have restricted 2-stroke motorcycle operation during the "smog season" in California. This action was taken due to the very high pollution potential of the 2-stroke motorcycle. The average 2-stroke motorcycle emits approximately 31 times as much exhaust hydrocarbons per mile as a new California 1975 automobile will emit. Consequently, prevention of increases in the number of motorcycles was proposed to prevent counter-productive shifts from automobiles to motorcycles as a result of other elements of the control strategy. The Agency has evaluated the feasibility of establishing emission standards for new motorcycles and is currently evaluating the availability of motorcycle emission control technology for existing motorcycles to reduce emissions.

Based upon testimony presented by motorcycle manufacturers, testimony presented by motorcycle trade associations, and an independent analysis by the Environmental Protection Agency, it appears that significant reductions in the emissions from new motorcycles can be achieved.

Accordingly, the EPA is no longer requiring an unconditional ban on motorcycle operations. Instead, the ban regulation has been rewritten to provide that it will not go into effect in the event that nationally applicable Federal regulations are promulgated that require at least a 50 percent reduction of 2-stroke motorcycle hydrocarbon emissions by 1976 and conformity with the 1976 hydrocarbon automobile standards by 1979 for both 2-stroke and 4-stroke vehicles. Significant reductions for carbon monoxide will also be required.

The Administrator will soon issue an Advance Notice of Proposed Rulemaking for emission standards for new motorcycles.

Bus and carpool lanes. The original proposal for the establishment of bus and carpool lanes has been retained in substance. However, the method of selecting the lanes has been changed from one based on the number of lanes in the road to one looking to the establishment of a coherent network of such lanes along transportation corridors. In some regions, pilot programs will be conducted to discover the best way to implement a full-scale program. EPA recognizes that, in some cases, measures such as freeway metering or the conversion of entire streets to bus and carpool use may prove preferable to such lanes. In every case, however, the establishment of bus/carpool lanes will proceed on the schedule specified unless and until other measures of equivalent stringency can be substituted for them.

Parking management program. The proposal for review of new commercial parking facilities has been retained in essence. It has been modified, however, to allow a wider range of variables to be considered. In essence, the regulation promulgated today would require the obtaining of a permit before commencing the construction of any facility of 50 or more spaces. A permit will only be granted after it is determined that the parking facility will not have an effect inconsistent with a plan's VMT reduction goals or cause a violation of any ambient air quality standard.

The promulgated regulations will encourage as an alternative to one-by-one review of new facilities that the appropriate local government submit to the Administrator a plan outlining the locally planned management of parking facilities for the next 5 years. If a submittal is made that shows to the satisfaction of the EPA that such planned parking management does not conflict with the California State Implementation Plan, the EPA will no longer review each proposed new parking facility individually. Such review by either the State or EPA will be consistent with the previously discussed indirect sources regulations.

Control of existing parking spaces; surcharge on parking. The proposal that spaces in public parking facilities be reduced by 20 percent drew almost universal adverse comment during this rulemaking proceeding. At the same time, the use of regulatory fees to discourage pollution-causing activities was widely supported. In particular the use of fees to control parking was mentioned.

EPA also believes that the use of such parking fees has much to recommend as a matter of policy. Accordingly, EPA is not promulgating a reduction in publicly owned parking spaces and is instead promulgating a regulatory fee to increase the price of parking in the three most heavily polluted AQCR's. Both the regulation's graphic coverage and the amount of the surcharge will be increased in three phases. At least 50 percent of the revenues will be used for mass transit.

In addition, testimony at the public hearings pointed out that the provision of parking spaces by employers for their employees tends to encourage employees

to drive to their place of employment rather than use carpools or mass transit. Such employers may therefore be regulated as "indirect sources" of air pollution as that term is defined in the General Preamble. At the same time, individual employers are particularly well equipped to establish and administer programs to reduce the dependence of their employees on the single-passenger automobile. Accordingly, as a further replacement for the proposed reduction in public parking spaces, a regulation is being promulgated that provides for employer-paid mass transit fares and special parking privileges to those who travel by carpool. It also provides for a surcharge over and above the commercial parking rate to be assessed on those who continue to commute by single-passenger automobile. The revenues from this surcharge will be used by each employer to promote use of mass transit.

This regulation will be implemented in stages, the first stage applicable to employers who provide more than 700 employee parking spaces, and the second to those who provide more than 70.

The purpose of this regulation is to effect sizeable reductions in VMT caused by commuting, which appears to be the mode of travel most easily diverted to mass transit and carpools.

This regulation also contains a provision restricting the enforcement of local zoning or land-use laws that require an employer to provide a given number of parking spaces for a given number of employees.

EPA was reluctant to interfere with local land-use decisions even to the limited extent that today's regulations provide. However, in light of the relationship among parking spaces, vehicle miles traveled, and air quality, a requirement that employers must provide a certain number of parking spaces could not be squared with the objectives of the Clean Air Act.

It should be emphasized, however, that the Agency recognizes that many aspects of the surcharge and employer incentive regulations are new and indeed unprecedented. They are being promulgated because of the requirement of the court order that all measures necessary to move towards the standards be included in the plans as promulgated. Even though promulgation was necessary to make these regulations legally effective, the Agency particularly invites public comment on them during the next 30 days. At the conclusion of that period, and after comments have been evaluated, the regulations will be revised if revision is appropriate in the light of the comments.

EPA also recommends that local jurisdictions consider whether present legal requirements unduly hamper shifts away from the present dependence on automobiles. Regulations such as those which require that any bus service obtain a certificate of public convenience and necessity before commencing operations may significantly discourage increased public transit service.

Carpooling systems. In all Regions, EPA is requiring the establishment of carpool matching systems to enable persons with similar daily travel patterns to make contact with each other and arrange carpools. In some regions, pilot programs will be established prior to establishment of the system throughout the region. Such a measure is necesary if the restraints on individual vehicle use contained in this plan are to have the desired effect of reducing VMT.

The EPA Regional Office in San Francisco has contacted various Federal agencies in order to facilitate the implementation of the pilot programs called for in the regulation. The Regional Office has experienced initial success in its first contacts, and this effort is continuing. A detailed guide for the operation of a bus/carpool matching program, along with a discussion of a number of successful programs in operation in many areas of the country are discussed in a U.S. Department of Transportation Federal Highway Administration Publication "Carpool and Buspool Matching Guide (Second Edition)", May 1973. This report discusses the considerations involved in a successful program such as public information, incentives, data processing, and a continuing updating of the service, and is an excellent guide and reference for conducting such a program.

The EPA believes that this approach to reducing vehicle miles traveled is an excellent short-term strategy. It involves a minimum investment and deserves the active promotion and support of government and industry.

Gasoline limitations. As noted above, the Clean Air Act leaves the Administrator no alternative to promulgating all measures necessary to meet the standards by 1977. Accordingly, the plan also contains a provision for reducing the supply of gasoline to the extent necessary to ensure attainment of the standards by that date. Such a measure, if implemented, would achieve the air quality standards. However, the EPA does not believe that massive gasoline rationing is either socially acceptable or enforceable, and will work toward alleviating the necessity for such drastic control in 1977.

State, local, and Federal implementation of control measures. In order to preserve the intent of the Clean Air Act that pollution problems be dealt with primarily at the local level, the Agency is requiring that State and local governments take action wherever possible and will involve the Federal Government only in the direct implementation of some programs. State and/or locally enforced, Federally promulgated requirements include: Retrofit programs; parking surcharge; bus and carpool lanes; and inspection and maintenance. Federally operated programs will be: motorcycle controls, gasoline limitations, and a bus/carpool incentive regulation directed at major employers.

STATE AND REGIONAL RESPONSIBILITIES

The State of California has recently redesignated some of the responsibilities of the California Air Resources Board (ARB). The ARB has the responsibility of developing and submitting implementation plans to achieve State and Federal air quality standards. When these plans require transportation controls that are not hardware devices, the California Department of Transportation (Cal/Trans) is responsible for the planning and development of these transportation control measures. The California Department of Transportation has informed EPA that it will submit alternative transportation plans for each AQCR based on the findings of State and local task forces.

State/local task forces. State/local task forces were formed in all AQCRs covered by this promulgation to develop alternatives to the EPA-proposed control measures, with the goal of developing draft plans by mid-October, 1973. Meetings were held between each task force and EPA representatives to discuss potential alternatives for inclusion in the EPA control plan promulgated for each AQCR. Although the EPA promulgations are not wholly comprised of recommendations of the task forces, EPA hopes that they reflect reasonable and locally acceptable measures to improve air quality in each AQCR. EPA also hopes that the recommended alternative plans being developed by the task forces later this fall will be approvable by EPA and will allow EPA to rescind its regulations.

The membership of the task forces follows:

Los Angeles. District VII Cal/Trans, California Air Resources Board, City and County of Los Angeles, California Highway Patrol, Southern California Association of Governments, Los Angeles County Air Pollution Control District, Southern California Rapid Transit District, South Coast Air Basin Coordinating Council, and the League of California Cities.

San Francisco. District IV Cal/Trans, California Air Resources Board, San Francisco Bay Area Metropolitan Transportation Commission, Association of Bay Area Governments, and the Bay Area Air Pollution Control District.

San Diego. District XI Cal/Trans, California Air Resources Board, San Diego Comprehensive Planning Organization (CPO), San Diego County Office of Environmental Management, San Diego County Air Pollution Control District, City of San Diego, the San Diego Unified Port District, and San Diego Transit Corporation.

San Joaquin Valley. Cal/Trans, California Air Resources Board, Regional Fresno Community Council, local transit officials, and county, city, and governmental bodies, including the Fresno County Air Pollution Control District.

Sacramento Valley. Cal/Trans, California Air Resources Board; Sacramento Regional Area Planning Commission, Sacramento and Yolo Solano Air Pollution Districts, county, city, and regional governmental bodies, and Sacramento Regional Transit District.

SOCIAL AND ECONOMIC IMPACT OF THE CONTROLS

A full analysis of the social and economic effects of the transportation con-

trol plans has not been made, because of the lack of time and because of the innate complexity of the problem. Many factors, such as the willingness of the public to use mass transit instead of the automobile for some trips, cannot be predicted. However, preliminary analysis has outlined some general trends and impacts.

The impact of stationary source controls is most easily predictable. Where manufacturing and marketing of certain goods and services require control devices or new distribution techniques, the cost of the devices and techniques will probably be passed on to the consumer. The requirements for vapor recovery in gasoline marketing will likely result in conservation of energy since gasoline, which previously was lost as vapor, will be recovered and used.

The program requiring inspection and mandatory maintenance of light-duty vehicles will involve two kinds of costs: (1) An inspection fee of about $2 for all vehicle owners; and (2) the cost of the required maintenance for vehicles failing the inspection, about $20 to $30. These costs are low, but they may fall most heavily on the owners of older cars, and these tend to be from the lower income groups. The cost of retrofit devices will vary according to the device required. Vacuum spark advance disconnect (VSAD) and exhaust as recirculation devices can be purchased and installed for $20 to $35, and an oxidizing catalyst will cost approximately $150. Again, the cost of retrofit devices will fall most heavily on the lower income groups, since they tend to own older, less-controlled automobiles. The cost of both inspection/maintenance and retrofit can be subsidized by State or local government through systems of taxing or fees. In the absence of subsidies or other relief, lower income groups will bear a disproportionate part of the burden of these costs.

Many control measures are designed to provide incentives for the use of mass transit. Preferential treatment of buses and carpools on freeways and city streets, incentives to employees to use mass transit, financing for mass transit, and management of parking facilities should make the use of buses and carpools more easy and attractive. This would result in a more balanced system of transportation, available to the entire public. It will necessarily cause some inconvenience and delay in the driving of private automobiles until the public shifts some trips from automobiles to mass transit. Increased ridership has been found to be a vital factor in improved bus service, and it is hoped that the regulations promoting the use of mass transit will lead to an improved system, which in turn is even more attractive. Improvements in public transportation will most benefit the poor, the old, and the young, so-called "captive" riders, although commuters should also benefit from preferential treatment of buses and carpools on highways and city streets. Improved public transit may also uncover and serve a latent trip demand in the present users of public transit.

It is also important to reiterate that the enforcement of the transportation control regulations will remove the present and future danger to public health from photochemical smog and carbon monoxide. This will result in better health among the affected population, greater human productivity because of elimination of some sick-days, and protection of the health of marginal groups.

Study of social and economic impact on San Diego AQCR. EPA has recently contracted the firm of Peat, Marwick, Mitchell, and Company of Washington, D.C., to conduct an initial socioeconomic impact study of the EPA-promulgated regulations for the San Diego Air Quality Control Region. The study will assess in particular the several transportation control measures initially promulgated and then project the socioeconomic effects of such controls if extended into additional phases. In addition to providing specific information on the San Diego plan, this study should provide a systematic methodology for assessing socioeconomic impacts in the other metropolitan areas of the country requiring transportation controls to meet air quality standards. Subcontractor support will be provided by the San Diego Comprehensive Planning Organization (CPO). In addition to CPO, coordination and technical review will be provided by the San Diego County Office of Environmental Management and the San Diego County Air Pollution Control District.

Public information grants. EPA realizes that no control program can work without public understanding and public support. The Agency is most anxious that the public be aware of the real public health need for transportation controls, and aware of the alternatives to the private automobile. It also desires strongly that the public have readily available routes of communication to EPA, and that they present their criticism, suggestions, and desires.

Besides its normal public affairs activities, publications, and contacts with groups and individuals, EPA is sponsoring a special public information campaign on the transportation controls. In this campaign, local community-based and civic groups will provide the public with information on the controls themselves, on the options communities have to ease the impact of and the need for the controls, and on the alternatives to the automobile, particularly mass transit. The local groups will work through both the media and through community meetings and involvement.

Those interested in obtaining information from these groups or participating in their efforts should contact the following groups:

Fresno: The Fresno Community Council, 208 Crocker Citizen's Bank Building, Fresno, Calif. 93721.

Los Angeles: The Clean Air Constituency, 1670 Beverly Boulevard, Los Angeles, Calif. 90026.

Sacramento: The League of Women Voters, 3140 "J" Street, Sacramento, Calif. 95816.

San Diego: Integrated Regional Environmental Management, 1600 Pacific Highway, San Diego, Calif. 92101.

San Francisco: The League of Women Voters, Hotel Claremont, Berkeley, Calif. 94705.

Southeast Desert Intrastate Air Quality Control Region Control Strategy

The Southeast Desert Intrastate Region, also know as the Southeast Desert Air Basin, is located in the southeast portion of the State of California. It is composed of all of Imperial County, the eastern portions of San Bernardino, Riverside, Kern, and San Diego Counties, and the northern portions of Los Angeles County. Geographically, this Region covers 33,600 square miles and is separated from the coastal regions by a series of mountain ranges. Elevations vary from 235 feet below sea level to 11,000 feet above sea level.

Air quality monitoring stations in the Region and in particular those in the Coachella Valley have recorded photochemical oxidant levels up to five times the national ambient air quality standards. The overall 1971 maximum readings in the Region are 0.38 part per million oxidants (recorded in Palm Springs) and 17 parts per million carbon monoxide (recorded in Indio). Using simple rollback and assuming a linear relationship between reactive hydrocarbons and oxidant concentrations, the reductions required to achieve the national standards are 70 percent of the reactive hydrocarbons and 47 percent of the carbon monoxide.

Significant data support the hypothesis that air pollution from the Metropolitan Los Angeles Intrastate Region is transported to and contributes substantially to high oxidant levels in the desert areas east of Los Angeles. It is expected that the emission controls proposed by the Administrator for the Metropolitan Los Angeles Region, in addition to State and local emission controls, will provide for attainment of the carbon monoxide and photochemical oxidant standards in the Southeast Desert Region by May 31, 1977. Any delay experienced in attaining the oxidant and carbon monoxide standards in the Los Angeles Region will cause a corresponding delay in attainment of the standards in the Southeast Desert Region.

A discussion of studies relating the air quality in the Southeast Desert Region to that in the Los Angeles Region can be found in "Air Quality Implementation Plan Development for Critical California Air Quality Control Regions: Summary Report," prepared under contract for the Environmental Protection Agency and available from the EPA Region IX office at 100 California Street, San Francisco, California 94111.

Because of the dependence of air quality in the Southeast Desert Region upon that in the Los Angeles Region, and because of the very small impact that emissions in the Southeast Desert Region have upon air quality there, no transportation controls are promulgated for this Region at present.

METROPOLITAN LOS ANGELES INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The Metropolitan Los Angeles Air Quality Control Region, also known as the South Coast Air Basin, covers a major portion of Southern California, encompassing all of Orange and Ventura Counties, the western portion of Riverside County, the southwest portion of San Bernardino County, the southern coastal portion of Santa Barbara County, and all but the northeastern corner of Los Angeles County. The air quality problems of the region are, in many ways, unique. The region is geographically and meteorologically closed. The encircling mountains and frequent inversions, hold in pollutants, and the Southern California climate provides ample sunshine to aid the formation of photochemical smog. The automobile is by far the dominant mode of transportation. In 1972 the South Coast Air Basin contained over 10 million persons and nearly 6 million motor vehicles.

This extremely high automobile population is combined with a low-density, sprawling pattern of development that distributes the population over the entire area of the basin, linked by a complex network of freeways. Moreover, the area is still growing. The current rate of population growth is now a 1.7 percent increase per year. However, the automobile population grows more rapidly, at 3 percent to 4 percent per year, and gasoline consumption grows even more quickly, at 4.5 percent per year.

This AQCR has the worst photochemical oxidant problem in the United States. In 1970, the national standard for photochemical oxidant was exceeded on over 250 days in the South Coast Basin. The high reading in the Basin was over 7 times the national standard, and during 1970 a full 10 percent of the exidant readings taken in the Basin were 0.40 ppm (five times the national standard) or higher.

In 1970, a high reading for photochemical oxidants of 0.62 ppm was taken at Riverside, and this reading is being used for air planning purposes.

Testimony was received that was critical of the procedures that EPA employed in selecting the maximum 1-hour reading for use in the rollback calculations. In response, EPA evaluated 3 years of air quality data at several locations within the South Coast Intrastate AQCR and found that the statistically evaluated maximum 1-hour value was 0.60 ppm. This value was only 0.02 ppm different from the value used to calculate the emissions reductions tabulated in the original proposal, and therefore has little or no effect on the VMT reductions required. A high carbon monoxide 8-hour average reading of 41 ppm was taken in 1970, and that reading is being used for air planning purposes. The overwhelming majority of the hydrocarbon and carbon monoxide emissions in the Basin are from motor vehicles. Besides stringent controls on stationary sources and requirements for emission controls on motor vehicles, a reduction in vehicle miles traveled (VMT) by the entire population of automobiles will be necessary to meet the oxidant standard in 1977. It should be pointed out that EPA estimates that some of the emission control strategies for motor vehicles, e.g., installation of catalytic mufflers, cannot be fully carried out before 1977.

Discussion of final EPA control strategy for metropolitan Los Angeles AQCR. The control strategy for the Los Angeles Region consists of various stationary and mobile source controls. Many of the stationary source controls are the same or slightly modified versions of the regulations proposed in the July 2, 1973, FEDERAL REGISTER. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 9–10, 1973, public hearings in Los Angeles and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy, but not claimed as part of the EPA plan reductions. EPA will carefully assess the reductions in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommend additional or revised strategies as needed.

The requirements for bus/carpool lanes and review of parking facilities are also being promulgated essentially as proposed, although significant changes in form have been made. Approximately 184 miles of traffic lanes, in two phases, will eventually be set aside for buses and carpools under this promulgation. Measures to require employers to discourage commuting by single-passenger automobiles, and to require the establishment of a regional carpooling system, have been added. The proposal for a reduction in public parking spaces has been dropped, and a regulatory fee to increase the price of parking has been added. The provision for gasoline limitations prior to 1977 has been eliminated. The ban on motorcycles during the smog season will not take effect as promulgated if emission standards for new motorcycles are established.

As an initial phase, some 65 miles on 3 freeway corridors have been designed for establishment of exclusive bus and carpool lanes, and another 12 miles of surface streets have been designated for the same purpose. The choice of specific routes was made at the recommendation of the Los Angeles Task Force and other testimony received at the public hearing, discussed earlier.

The proposal to require a bus/carpool computer matching and promotion system by March, 1974, has been modified to require a phased computer matching program that will initially involve employees in the Los Angeles City CBD and eventually expand to include all employees in the Region.

The control tactics (including such details as the emission control reduction factors and the population fraction affected by the tactics), and other data needed to calculate the emission inventory outlined in Table 3 are outlined or referenced in the appendix of the Technical Support Document for the Metropolitan Los Angeles Intrastate Air Quality Regional Transportation Control Plan—Final Promulgation, available from the EPA, Region IX Office at 100 California Street, San Francisco, California 94111, and at the Freedom of Information Center, EPA, 401 M Street SW., Washington D.C. 20460.

Many of the measures EPA and the local task force have designed to reduce VMT are untried. EPA has gathered the available data and has funded several studies and analyses of the VMT reductions possible from various transportation control; based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and local measures. The EPA strategy for the Metropolitan Los Angeles AQCR should yield reductions of between 14 and 31 percent. (These and subsequent calculations can be found in the Technical Support Document, available at the Region IX and Washington offices specified above.) It should be noted that EPA has promulgated many of the local measures and therefore the 14 to 31 percent VMT reduction reflects these task force measures. An additional VMT reduction of 3 to 12 percent would result from other task force recommended measures. Based on present data, the remaining VMT reduction can only be achieved by means such as gas rationing.

TABLE 3.—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN THE LOS ANGELES AQCR IN 1977

Emission source and control measures	Emissions and reductions of RHC, tons/day	Percent reduction per measure
Stationary source emissions in 1977 without proposed control strategy	236	
Expected reductions:		
1. Vapor recovery at gasoline stations	−132	18.0
2. Dry cleaning solvent controls and degreasing solvent controls	−32	4.3
Stationary emissions remaining	72	
Mobile source emissions in 1977 without proposed control strategy	613	
Expected reductions:		
1. Reductions from only EPA-promulgated VMT control strategies assuming a 14% VMT reduction [1]	−61	8.3
2. Catalyst retrofit, and mandatory inspection and maintenance	−103	14.0
3. Motorcycle limitations	−24	3.3
4. VMT reductions and evaporative emission reductions necessary from additional control strategies to be implemented in 1977	−384	52.1
Mobile emissions remaining	41	
Total emissions remaining	113	
Total emissions allowable [2]	112	

[1] Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 43 percent VMT, or 187 tons/day could occur.

[2] Based on the "Schuck Model" which is described in the "Los Angeles Technical Support Document."

Locally implemented controls. A task force, discussed elsewhere in this preamble, was formed in the Los Angeles area to develop alternatives to the EPA plan. The task force has since made several preliminary recommendations for

local actions that could reduce emissions both by developing a better, more widely used public transportation system, and by smoothing and speeding the flow of automobile traffic. The Task Force report states that a long-range and a short-range plan to expand public transit services and facilities are being drawn up now by member agencies of the task force. EPA supports the goals of these plans: To provide an alternate form of transportation to absorb trips diverted from the automobile, and to develop a more balanced transportation system in the South Coast Basin. We expect to cooperate closely with the task force members in drawing up these plans.

The task force recommended a series of measures to speed the flow of traffic and avoid the bottlenecks and stop-and-go driving that are both polluting and wasteful of energy. These measures include: Automated and interconnected traffic signals; freeway ramp metering; expanded fringe park-and-ride facilities; and other traffic flow improvements. The task force believes these systems can speed traffic, cut emissions, and conserve energy.

The task force recommendations have not been adopted as enforceable regulations and submitted to EPA as part of the California Air Quality Standards and Implementation Plan. However, EPA encourages the adoption submission of these recommendations as part of the State plan.

Sacramento Valley Intrastate Air Quality Control Region Control Strategy

The Sacramento Valley Intrastate Air Quality Control Region, also known as the Sacramento Valley Air Basin, lies in the center of Northern California, bounded on the west by the Coast Range, on the north and east by the Cascade. Range and the Sierra-Nevada Range, and on the south by the San Joaquin Valley. This region is composed of portions of 15 counties. The Region contains approximately 21,300 square miles, 1.2 million people, and 840,000 motor vehicles. Air pollution control in the Region falls under the jurisdiction of the local air pollution control districts. As in the rest of the State, the local and regional organizations deal primarily with stationary source controls, leaving mobile source controls to the California Air Resources Board.

During the period 1970 to 1972, the Sacramento Valley Region experienced numerous violations of both Federal and State air quality standards. Photochemical oxidants are the predominant problem, and it appears from the limited data evaluated that the problem has increased in recent years, both in number of violations that occur and the maximum oxidant level experienced. Based on the highest or base year 1-hour maximum oxidant reading of 0.28 ppm during 1972 in Sacramento and using the proportional rollback model, a 71 percent reduction in reactive hydrocarbon emissions from 1972 base year emission levels would be required to meet the national ambient air quality standard for oxidants. (The maximum oxidant reading used was evaluated by the method described earlier in the Metropolitan Los Angeles preamble, and was found to be substantially correct).

Since the air quality levels are most severe in the southern portion of the Region, centering around Sacramento County, it appears appropriate to attempt to solve the airshed problem by developing a control strategy specifically for Sacramento County and the three counties in its immediate vicinity (Yolo, Placer, and El Dorado). In the Sacramento Valley and also the San Joaquin Valley, vast areas are sparsely populated but others are highly urbanized and have high emission densities in comparison with the rural areas. Thus, most transportation control strategies are limited to these urbanized areas.

Table 4 summarizes the effects of the promulgated control strategies.

Table 4.—Summary of Impact of Control Strategies in Sacramento "Regional Area" in 1977

Source of pollutant and control measures	Emissions and reductions tons/day of reactive hydrocarbons	Percent reductions per measure
Stationary source emissions in 1977 without control strategy	40.6	
Expected reductions:		
1. Gasoline marketing vapor recovery	−26.0	43.0
2. Surface coating improvements	−1.1	1.6
3. Dry-cleaning controls	−0.7	1.2
4. Degreasing controls	−1.9	3.2
5. State limitations on burning	−2.1	3.4
Stationary emissions remaining	8.8	
Mobile source emissions in 1977 without proposed control strategy	54.1	
Expected reductions:		
1. Reductions from only EPA-promulgated VMT control strategies assuming a 5 percent VMT reduction. [1]	−1.7	2.7
2. Catalyst retrofit, mandatory inspection/maintenance program, and vacuum spark advance program	−9.9	6.2
3. Motorcycle emission regulations	−2.0	3.3
4. VMT reductions necessary from additional control strategies to be implemented in 1977	−15.3	25.4
Mobile emissions remaining	25.2	
Total emissions remaining	34.0	
Allowable emissions to attain standards for photochemical oxidants. [2]	34.5	

[1] Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 27 percent VMT, or 9.2 tons/day could occur.
[2] Based on linear rollback model.

VMT will have to be reduced by 64 percent if the national ambient air quality standard for photochemical oxidants is to be attained by 1977 in the Sacramento Valley Region.

Based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and the local measures. The EPA strategy for the Sacramento Valley Intrastate AQCR should yield reductions of between 45 and 14 percent; the local measures should provide an additional 4 to 13 percent improvement in air quality. It should be noted that EPA has promulgated many of the locally supported measures, and therefore the 5 to 14 percent VMT reduction includes the effects of these measures. An additional VMT reduction of 4 to 13 percent could result from additional locally implemented measures. Based on present data, the remaining reduction needed can only be achieved through more stringent measures, such as gasoline rationing, in 1977.

Discussion of final EPA control strategy for the Sacramento Valley. The control strategy for the Sacramento Valley Region consists of various stationary and mobile source controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same, or slightly modified versions, of the regulations proposed on July 16, 1973. The transportation control measures have been modified considerably. Each of the regulations promulgated or approved is considered to be enforceable by the Agency.

The measures reflect testimony received at the August 10, 1973 public hearing in Sacramento and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve the standard by 1977. EPA will carefully assess the reduction in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommend additional strategies as needed between now and the 1977 legal attainment date.

The proposal to achieve a bus/carpool computer matching and promotion system by March of 1974 has been modified to require that such a system be initially established at McClellan Air Force Base in Sacramento. Upon evaluation, the system will be expanded throughout the portions of the Regions.

A "Mass Transit Priority and Planning" regulation for a four-county portion of the Sacramento Valley Region has been added to the control plan. The Sacramento Regional Area Planning Commission (SRAPC) July 1972 report "Transit Plan and Program", states that the Sacramento City "J" Street bus and traffic situation justified bus priority treatment. In addition, SRAPC reports and discussions at the meetings between EPA and the Task Force indicate that there is a near term potential for mass transit priority treatment (e.g. U.S. 99 through Southern Sacramento). As a result, EPA has promulgated final regulations calling for specific action in the "J" Street situation, and a general action outline plan for mass transit priority treatment on streets and freeways.

Surcharges on public and private parking have not been imposed in the urbanized portions of the Sacramento Valley Region as they have in San Francisco, San Diego, and Los Angeles. However, the use of such a surcharge to raise revenues for mass transit is being considered by the Administrator, and written com-

ment on this point is particularly invited.

Locally implemented strategies. The public hearing testimony, written comments, and the Sacramento Task Force indicated a wide variety of measures that could best be carried out on the local or State level. The EPA plan notes these measures as being applicable toward attainment of the oxidant standard and will encourage their implementation, although the reductions are not credited as part of the EPA plan. Furthermore, EPA will evaluate progress and success in the implementation of these and similar measures and if found necessary, promulgate additional measures to supplement them. Many of these measures will likely be contained in the anticipated revisions to the State Implementation Plan as a result of the Cal/Trans task force findings.

Major improvements to the mass transit system in Sacramento have occurred during the past year and are expected to be expanded as additional funds become available for these purposes.

A meeting between EPA and the transportation task force officials confirmed that the Sacramento Regional Transit District had initiated and is in the process of implementing an innovative and aggressive transit program. It is expected that the State of California Department of Transportation vehicle miles traveled reduction plan to be submitted to EPA will further define this program, and will allow EPA to monitor and evaluate the progress of future public mass transit program implementation, including the present and estimated future financial commitment to mass transit. The Sacramento Regional Transit District initiated a 25¢ flat fare recently, and bus ridership has dramatically increased since that time. Express bus routes to outlying areas of the metropolitan area were established in the past year and several more will be in operation by the end of 1977. Fringe parking lots have been established and are being expanded along these routes as well as at major regional shopping centers. There are plans to place bicycle protection facilities at these fringe parking lots to allow nearby residents to bicycle to the bus stops. Bikeways are very extensive in the Sacramento area due to the flat terrain. Ridership incentive programs are being planned through an extensive public information program. Dial-A-Bus and subscription bus service will also be carefully examined. An area being seriously examined for applicability of special bus service is the route between the University of California campus at Davis and certain residential areas in the city of Sacramento, 18 miles away.

Various traffic flow improvement programs are also underway or proposed for the next 4 years in the Sacramento Region. These include a synchronized traffic signal system for major arterials, easing of traffic bottlenecks, and additional ramp metering.

A final measure that will likely be the subject of further consideration and experimentation in the next few years will be the variation of the work week to four 10-hour days, and other combinations to determine the effects of the variations on air quality and VMT. Governmental agencies will be early candidates for this program.

San Joaquin Valley Intrastate Air Quality Control Region Control Strategy

The San Joaquin Valley Intrastate Region, also known as the San Joaquin Air Basin, consists of all of the counties of Amador, Calaveras, Fresno, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tulare, and Tuolumne, and the western portion of Kern County. This Region lies in the southern portion of the Central Valley and extends into the neighboring mountain slopes. It is bounded on the west by the Coastal Range, on the east and south by the Sierra-Nevada and Tehachapi Mountains, respectively, and on the north by the Sacramento Valley Intrastate Region. The Region includes 30,200 square miles of land area and had a population of over 1.6 million people in 1970. Population is growing rapidly. Although it contains 19 percent of the State's land area, the Region has only 8 percent of the State's population. National ambient air quality standards have been exceeded in seven locations in the San Joaquin Valley Region: Stockton, Fresno, Bakersfield, Modesto, Visalia, Parlier, and Five Points. The highest or base year 1-hour maximum oxidant value of .24 ppm occurred in the Region in 1971 at Modesto. The base year maximum oxidant reading used was statistically evaluated by the method described earlier in the Metropolitan Los Angeles preamble, and was found to be substantially correct. Each of the areas surrounding the cities has unique characteristics with regard to air quality, meteorology, stationary sources, population distribution, and transportation; the transportation control strategy proposed herein recognizes this fact. A thorough analysis was made on Kern County (Bakersfield), Fresno County (Fresno), and San Joaquin County (Stockton). Insufficient data exist for adequate analyses of Parlier and Five Points (both in Fresno County and Modesto), but it is expected that the proposed transportation controls as applied to Fresno, Bakersfield, and Stockton areas will be adequate for attainment of the national ambient air quality standard for photochemical oxidants in these other locations as well.

Using the proportional rollback model, reductions in base year emission levels of reactive hydrocarbons of up to 67 percent (for Modesto) will be required in various counties in the Region in order to meet the air quality standards.

As an example, Table 5 shows the approximate effect that the control strategies will have in Kern County.

A 39 percent reduction in VMT is necessary by 1977 for attainment of the standards in Kern County. In Stanislaus County a similar situation exists with a corresponding need for VMT reduction. In Fresno County, present studies indicate that a 16 percent VMT reduction by 1975 would provide for attainment of the standards. In San Joaquin County, a 32 percent VMT reduction is necessary in 1975 for attainment of the standards, but only 8 percent in 1977.

Table 5.—Summary of Impact of Control Strategies in Kern County Portion of San Joaquin Valley Region in 1977

Sources and control measures	Emissions and reductions of reactive hydrocarbons, tons/day	Percent reductions per measure
Stationary source emissions in 1977 without proposed control strategy	11.3	
Expected reductions:		
1. Vapor recovery at gasoline stations	−5.8	37.2
2. Surface coating restrictions, drycleaning controls, and degreasing controls	−0.7	4.5
Stationary source emissions remaining	4.8	
Mobile source emissions in 1977 without the proposed control strategy	21.4	
Expected reductions:		
1. Reductions from only EPA promulgated VMT control strategies assuming a 4 percent VMT reduction [1]	−.6	3.8
2. Catalyst retrofit, expansion of State nitrogen oxides program, and mandatory inspection and maintenance	−4.0	25.6
3. Motorcycle emission regulations	−.8	5.1
4. VMT reductions necessary from additional control strategies to be implemented in 1977	−3.7	23.8
Mobile emissions remaining	12.5	
Total emissions remaining	17.3	
Allowable emissions for attainment of standards for photochemical oxidants [2]	17.2	

[1] Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 24 percent, or 3.6 tons/day could occur.
[2] Based on linear rollback model.

Based upon the available data, EPA made rough estimates of the VMT reductions that can reasonably be expected from the EPA and the local measures. The EPA strategy for the San Joaquin Valley Intrastate AQCR should yield reductions of between 4 and 13 percent; the local measures should provide an additional 3 to 11 percent reduction in VMT. Based on present data the remaining VMT reduction can only be achieved through more stringent means such as gas rationing in 1977.

Discussion of final EPA control strategy for the San Joaquin Valley AQCR. The control strategy for the San Joaquin Valley Region consists of various stationary and mobile controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same as or slightly modified versions of the regulations proposed on July 16, 1973. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 6 and 7, 1973, public

hearings in Fresno, and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve the standard by 1977. EPA will carefully assess the reductions in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommend additional strategies as needed between now and the 1977 legal attainment date.

The proposal to require a bus/carpool computer matching and promotion system by March 1974 has been modified to require that such a system be initially established at the Internal Revenue Center in Fresno. Upon evaluation, the system will be expanded throughout the four metropolitan areas of the Region. Finally, a "Mass Transit and Transit Priority Planning" regulation for the San Joaquin Valley Region has been added to the control plan.

A study sponsored by the California Department of Transportation is presently being conducted to determine the potential for public transit usage in the Fresno Area. Of particular interest to EPA will be the potential to establish preferential bus/carpool treatment on a north-south corridor between the Fresno CBD and northern residential suburbs. A six-lane freeway presently under construction in this corridor will be closely examined. It appears that similar studies will be necessary in other metropolitan areas of the Region in order to provide a rational basis for expanding mass transit service in certain areas of the San Joaquin Valley Region. As a result, EPA has promulgated final regulations calling for additional studies in the Stockton, Bakersfield, and Modesto areas, From these future investigations and the Fresno study (in progress) transit strategy recommendations, including transit priority strategies, are to be submitted. These are to include implementation milestone timetables and obstacles, so that the Administrator can review all available information and determine the need for and the progress of implementation.

Surcharges on public and private parking have not been imposed in the urbanized portions of the San Joaquin Valley Region as they have in San Francisco, San Diego, and Los Angeles. However, the use of such a surcharge to raise revenue for mass transit is being considered by the Administrator, and written comment on this point is particularly invited.

Locally implemented strategies. The public hearing testimony, written comments, and the San Joaquin Valley Task Force indicated a wide variety of measures that could best be carried out on the local or state level. The EPA plan notes these measures as being applicable toward attainment of the oxidant standard and will encourage their implementation, although the reductions are not credited as part of the EPA plan. Furthermore, EPA will evaluate the progress and success in the implementation of these and similar measures and, if found necessary, promulgate additional measures to supplement them. Many of these measures will likely be contained in the anticipated revisions to the State Implementation Plan as a result of the Cal/Trans task force findings. In meetings between EPA and the transportation task force officials, it was noted that the cities of Fresno and Stockton were in the process of upgrading and expanding their mass transit bus systems. The City of Bakersfield has recently taken over operation of a mass transit bus system, and has experienced encouraging initial success in its effort to increase ridership. The California Department of Transportation vehicle miles traveled reduction plan to be submitted to EPA is expected to document the progress made by the present mass transit programs in the Valley, and allow EPA to monitor and evaluate the need for and progress of future public mass transit program implementation, including the present and the estimated future financial commitment to mass transit.

Local agencies and private citizens gave written and verbal testimony on the desirability of improved bicycle networks. Due to the level terrain, many trips in the San Joaquin Valley could be taken by bicycle. It is anticipated that improvements of this type will be made in the next several years.

San Diego Intrastate Air Quality Control Region Control Strategy

The San Diego Intrastate Region, also known as the San Diego Air Basin, is located in the southwest corner of the State and consists of nearly all of San Diego County. It is bounded on the east by the summit of the Peninsular Range, on the north by Orange County, and on the south and west by Mexico and the Pacific Ocean, respectively. The airshed has a land area of approximately 3,040 square miles, and, as of 1973, a population of some 1.5 million people. It is estimated that the motor vehicle population in 1972 was approximately 715,000. The Region's population is concentrated primarily in the City of San Diego and in the incorporated areas along the coast. The mountainous terrain and frequent inversions hold in pollutants, and the Southern California climate provides ample sunshine to aid in the formation of photochemical oxidants. The automobile is presently the dominant mode of transportation, and accounts for the majority of the hydrocarbon and carbon monoxide emissions. Air pollution control in the Region is the local responsibility of the San Diego County Air Pollution Control District. Since the airshed is contained within one county, no additional regional coordinating council is required for stationary source controls. As in the rest of the State, mobile source emission controls are the responsibility of the California Air Resources Board.

An important factor in the design of any air pollution control strategy for the San Diego Region is the proximity of the Tijuana, Mexico, metropolitan area. Tijuana is now the fifth largest city in Mexico with a population of over 500,000, and is located adjacent to the United States-Mexico Border, 12 miles south of downtown San Diego. Although prevailing meteorological conditions do not normally move Tijuana-caused air pollutants over the metropolitan San Diego area, there is substantial movement of motor vehicles from Tijuana to locations in the San Diego area on a daily basis. Furthermore, enforcement of several of the EPA-promulgated regulations will be more difficult due to the border problem. EPA will work closely with environmental authorities in the Republic of Mexico to help alleviate air pollution problems in this and other international urban areas.

The national ambient air quality standards for photochemical oxidants and carbon monoxide have been exceeded in the Region. In 1970, the maximum 1-hour oxidant reading recorded in the Region was 0.40 ppm at the Oceanside station. The use of this oxidant reading for air planning purposes was rejected on the basis that the reading was the result of an unusual traffic stoppage caused by highway construction, combined with unusually heavy volume that day. The next highest maximum 1-hour oxidant reading that occurred in the Region was 0.32 ppm at the Escondido Station, in 1972, and this reading was used for oxidant air planning purposes. (The maximum oxidant reading was statistically evaluated by the method described earlier in the Metropolitan Los Angeles preamble, and was found to be substantially correct.) A high 8-hour carbon monoxide reading of 18 ppm recorded in 1972 is being used for carbon monoxide air planning purposes. As in other areas of California, the predominant air pollution problem is photochemical oxidants. A review of air quality data for 1970–1972 shows that both oxidant and carbon monoxide standards were frequently exceeded. Both the frequency of violations and the maximum levels of oxidant experienced indicate the need for extensive mobile and stationary source control if the national ambient air quality standards are to be achieved. The oxidant problem is the main obstacle to attainment of the standards.

Emissions must be lowered to the following levels to meet the photochemical oxidant and the 8-hour carbon monoxide standards: the reactive hydrocarbon emissions must be lowered to 25 percent of 1972 emission levels in order to meet the oxidant standard, and the carbon monoxide emissions must be lowered to 50 percent of 1972 emission levels in order to meet the carbon monoxide standard, using the proportional rollback model.

The majority of the carbon monoxide and reactive hydrocarbon emissions in the Region are attributable to motor vehicles. In addition to stringent controls for stationary sources and requirements for mechanized emissions controls on motor vehicles, VMT reductions will also have to be effected in order to meet the oxidant standard in 1977. It should also be pointed out that it is estimated by EPA that one of the proposed technical strategies, catalyst retrofit, cannot be implemented before 1977.

Table 6 shows the impact the proposed measures will have on total emissions in the San Diego Region.

TABLE 6.—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN SAN DIEGO REGION IN 1977

Source and control measures	Emissions and reductions of reactive hydrocarbons, tons/day	Percent reductions per measure
Stationary source emissions in 1977 without proposed control strategy	20.6	
Expected reductions:		
1. Surface coating restrictions, dry cleaning, and degreasing controls	−15.8	28.2
Stationary emissions remaining	4.8	
Mobile source emissions in 1977 without proposed control strategy	86.4	
Expected reductions:		
1. Reductions from only EPA promulgated VMT control strategies assuming an 11 percent VMT reduction [1]	−6.4	11.4
2. Catalyst retrofit, and mandatory inspection and maintenance	−12.9	23.0
3. Motorcycle limitations	−1.9	3.4
4. VMT reductions necessary from additional control strategies to be implemented in 1977	−19.0	34.0
Mobile emissions remaining	46.2	
Total emissions remaining	51.0	
Allowable emissions for attainment of standard for photochemical oxidants [2]	51.0	

[1] Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 29 percent, or 16.9 tons/day could occur.
[2] Based on linear rollback model.

Based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and local measures. The EPA strategy for the San Diego Intrastate AQCR should yield reductions of between 11 and 19 percent. The local measures not promulgated by EPA should provide an additional 7 to 10 percent reduction in VMT. It should be noted that EPA has promulgated many of the local measures and therefore the 11 to 19 percent VMT reduction reflects these task force measures. An additional VMT reduction of 7 to 10 percent would result from additional task-force recommended measures. Based on present data, the remaining VMT reduction can only be achieved through more stringent means such as gas rationing in 1977.

It is assumed by EPA, and is implicit in the control strategy calculations, that all Federal facilities will comply with State, local, and EPA air pollution emissions rules and regulations. Due to the extensive military activities in the San Diego Region and the significant harm to air quality that emissions from sources connected with these activities could produce, it is particularly important that military vehicles, operations, and facilities follow presidential Executive Order 11507 by conforming to State, local, and EPA rules and regulations. It is estimated that 40 percent of all aircraft operations in the San Diego area are by the military.

A recent decision to consolidate various Naval activities in the San Diego area is estimated by local officials to have the net effect of adding 50,000 persons to the San Diego area in the next 2 years. Several of the EPA regulations will initially be specific to military facilities, and EPA will work closely with the Department of Defense to develop additional strategies to lessen the impact of emissions from military activities.

Discussion of final EPA control strategy for San Diego AQCR. The control strategy for the San Diego Region consists of various stationary and mobile source controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same, or slightly modified. Versions of the regulations proposed in the July 16, 1973, FEDERAL REGISTER. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 7, 1973, public hearing in San Diego and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve the standard by 1977.

The proposal to required a bus/carpool computer matching and promotion system by March 1974 has been modified to require that such a system be initially established at the U.S. Navy Electronics Laboratory and the U.S. Navy Underwater Systems Center in San Diego. Upon evaluation, the system will be expanded throughout the region. The Cal/Trans task force estimates a 4-percent reduction in VMT by 1977 if half the employees use the three-phase volunteer carpool system. Total cost of implementing this measure is $175,000. Finally, approximately 10 miles of freeway will be given preferential bus/carpool treatment through ramp metering with bus/carpool bypass lanes, and a major downtown San Diego street, Broadway, will be converted to exclusive bus usage as the first phase of a program to establish preferential treatment for mass transit.

Locally implemented strategies. The public hearing testimony, written comments, and the San Diego Task Force indicated a wide variety of measures that could best be carried out on the local or State level. The EPA plan notes these measures as being applicable toward attainment of the oxidant standard and will encourage their implementation, although the reductions are not credited as part of the EPA plan. Furthermore, EPA will evaluate the progress and success in the implementation of these and similar measures and if necessary, promulgate additional measures to supplement them. Many of these measures will likely be contained in the anticipated revisions to the State Implementation Plan as a result of the Cal/Trans task force findings. The task force estimates that the measures discussed below will accomplish at least a 12.5 percent reduction in VMT by 1977.

Major improvements to the mass transit system in San Diego have occurred during the past year and are expected to be expanded as additional funds become available for these purposes. San Diego Transit initiated a 25¢, all-destinations, fare in August 1972 and bus ridership has doubled since that time. Three express bus routes to outlying areas of the metropolitan area were established in the past year and at least six more will be in operation by the end of 1977. This part of the system will require at least 125 new buses with an additional 175 feeder and local, off-peak buses to serve the express routes. Also, it is planned that 30 buses will be added to the North County system. Fringe parking lots will be established along these routes as well as at major regional shopping centers. Approximately 20 fringe parking lots are planned to serve the expanded mass transit system with a pilot project planned at Miramar for 1975. There are plans to place bicycle protection facilities at these fringe parking lots to allow nearby residents to bicycle to the bus stops. Ridership incentive programs are being planned through an extensive public information program. Dial-A-Bus and subscription bus service will also be carefully examined. The Cal/Trans task force estimates a 5-percent reduction in VMT by 1977 through implementation of these measures.

The City of San Diego has a $125,000 regional bikeway plan under consideration, consisting of 30 local bikepath proposals. Additionally, Cal/Trans is examining at least two bike routes to parallel portions of proposed freeway improvements.

Various traffic flow improvement programs are either underway or proposed for the next 4 years in the San Diego Region. These include a major synchronized traffic signal system for major arterials, easing of traffic bottlenecks, and additional ramp metering. City officials are examining the possibility of fringe parking facilities on the perimeter of the central business district with a system of people-movers and automobile bans in the same area.

A final measure that will likely be the subject of further consideration and experimentation in the next few years will be the variation of the work week to four 10-hour days and other combinations to determine the effects of such variations on air quality and VMT. Governmental agencies will be early candidates for this program.

SAN FRANCISCO BAY AREA INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The San Francisco Bay Area Intrastate Region is comprised of nine counties, namely: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Napa, Solano, and Sonoma. The region covers approximately 5,600 square miles and has within its bounds approximately 4.6 million people and 2.7 million motor vehicles. Air pollution control in the region falls under the jurisdiction of the Bay Area Air Pollution Control District created by the California Legislature in 1955. During 1971, the Region experienced numerous violations of both Federal and State air quality standards. Based upon the linear rollback model and a high year or base year maximum

1-hour oxidant reading of .36 ppm which occurred in 1971 at San Leandro, a 78-percent reduction in base year reactive hydrocarbon emissions is required to achieve the ambient air quality standards for photochemical oxidant. (The maximum oxidant reading used was statistically evaluated by the method described earlier and was found to be substantially correct.)

Although mobile sources presently account for the majority of the emissions, their control alone will not be sufficient to allow for attainment of national ambient air quality standards. Table 7 shows the impact the proposed measures will have on the total emissions in the Region.

TABLE 7.—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN SAN FRANCISCO BAY REGION IN 1977

Source of pollutant and control measures	Emissions and reductions tons/day of reactive hydrocarbons	Percent reduction per measure
Stationary source emissions in 1977 without control strategy	225	
Expected reductions:		
1. Gasoline marketing vapor recovery	−138	45.8
2. Surface coating, dry cleaning, and degreasing controls	−37	12.3
Stationary source emissions remaining	50	
Mobile source emissions in 1977 without proposed control strategy	201	
Expected reductions:		
1. Reductions from only EPA-promulgated VMT control strategies assuming an 11 percent VMT reduction.[1]	−14	4.7
2. Light-duty motor vehicle inspection and maintenance and catalytic converter retrofit	−33	11.0
3. Motorcycle emissions regulation	−6	2.0
4. VMT reductions necessary from additional control strategies to be implemented in 1977	−73	24.2
Mobile emissions remaining	75	
Total emissions remaining	125	
Allowable emissions to attain standards.[2]	125	

[1] Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 32 percent VMT, or 41 tons/day could occur.
[2] Based on linear rollback model.

A VMT reduction of 97 percent is necessary if the national standard for photochemical oxidants is to be attained by 1977.

Based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and the local measures. The EPA strategy for the San Francisco Bay Area Intrastate AQCR should yield reductions of between 11 and 28 percent; the local measures should provide an additional 4 percent improvement in air quality. Based on present data, the remainder of the VMT reduction needed can only be achieved through more stringent measures, such as gas rationing, imposed in 1977.

It is hoped that in the process of developing a regional transportation plan, the Metropolitan Transportation Commission will be able to determine the effect of its plan upon air quality generally, and specifically upon the miles traveled by automobiles. Many of the measures in the EPA-promulgated control plan consist of MTC adopted strategies.

Discussion of final EPA control strategy for San Francisco Bay Area AQCR. The control strategy for the San Francisco Bay Area Region consists of various stationary and mobile source controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same, or slightly modified, versions of the regulations proposed in the July 16, 1973, FEDERAL REGISTER. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 8, 1973 public hearing in San Francisco and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve standard by 1977. For example, full implementation of the Bay Area Rapid Transit (BART) system during the next year should reduce VMT by 2 percent in the Region. EPA will carefully assess the reductions in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommend additional strategies as needed between now and the 1977 legal attainment date.

The proposal to require a bus/carpool computer matching and promotion system by March of 1974 has been modified to require an in-depth evaluation of the present carpool program being implemented by governmental agencies in the San Francisco CBD and to determine the most feasible plan for full scale implementation. Special emphasis is given to pilot bus/carpool programs at Alameda Naval Air Station, Moffett Field Naval Air Station, U.S. Army Presidio, and Treasure Island Naval Station.

Locally implemented strategies. The public hearing testimony, written comments, and the meetings with the State and local transportation officials (San Francisco "Task Force") indicated a wide variety of measures that could be best carried out on the local or State level. In the San Francisco Bay Area, such measures as those being investigated and implemented through the Metropolitan Transportation Commission (MTC) are of particular interest to the Environmental Protection Agency, particularly with regard to their effect on air quality. At the public hearings on the EPA transportation control plan proposal, testimony given by an official representing the MTC shows that 10- to 15-percent VMT reduction will occur as a result of the MTC plan, and that an additional 5-percent VMT reduction could occur with an enlarged MTC program. In regulations promulgated by this rulemaking, the EPA is requiring the State to submit an analysis of the status of each element of the MTC Regional Transportation Plan and to substantiate its effect on air quality. It is the Administrator's understanding that such an analysis is currently underway by the California Department of Transportation (Cal/Trans) and will be submitted to EPA.

Locally implemented strategies that the MTC and State are investigating include in part: Bridge toll fare increases, exclusive bus and carpool lanes, ramp metering, increased bicycle facilities, improved local transit, anticipated Bay Area Rapid Transit expansion, increased ferry service to the North Bay, fringe parking facilities, and reduced transit fares.

Possible further action. The Clean Air Act requires that all "reasonably available" measures to reduce emissions be applied between now and 1977. The plan promulgated today attempts to fulfill this requirement.

The Administrator is conscious, however, that his knowledge of this field is necessarily imperfect and incomplete. Measures may not work as well as anticipated, or they may work better. Further study may show that more controls are needed or feasible or that different methods of attaining the same end would be preferable. In cases where State or local actions are considered in calculating emission reductions, they may not be implemented as presently anticipated.

The plan approved today constitutes final rulemaking. Its measures are legally enforceable, and EPA will enforce them unless and until alternatives are suggested and found to be preferable. However, the lack of knowledge in this field makes it highly conceivable that such alternatives will be suggested. EPA welcomes such suggestions, and will in addition monitor the effect of this plan continuously to see whether revisions, or the addition of more stringent measures, is in order.

(Secs. 110(c), 301(a), Pub. L. 89–272, 79 Stat. 992 (42 U.S.C. 1857c–5(c)).)

Dated: October 30, 1973.

JOHN QUARLES,
Acting Administrator.

Part 52 of Chapter I, Title 40, of the Code of Federal Regulations is amended as follows:

Subpart F—California

1. In § 52.222, paragraphs (b) and (c) are added to read:

§ 52.222 Extensions.

* * * * *

(b) The Administrator hereby extends the attainment dates for the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) as follows: San Francisco By Intrastate, two years (to May 31, 1977); Metropolitan Los Angeles Intrastate, two years (to May 31, 1977); San Diego Intrastate, two years (to May 31, 1977); Sacramento Valley Intrastate, two years (to May 31, 1977); San Joaquin Valley Intrastate, two years (to May 31, 1977); Southeast Desert Intrastate, two years (to May 31, 1977).

(c) The Administrator hereby extends the attainment dates for the national

standards for nitrogen dioxide as follows: Metropolitan Los Angeles Intrastate, two years (to May 31, 1977).

§ 52.237 [Reserved]

2. Section 52.237 is revoked and reserved.

§ 52.238 [Amended]

3. In § 52.238, the attainment date table is amended by revoking footnotes f and g and revising the first column (Air Quality Control Region) and the last three columns [Nitrogen Dioxides, Carbon Monoxide, and Photochemical oxidants (Hydrocarbons)] to read as follows:

Air Quality Control Region	Nitrogen dioxide	Carbon monoxide	Photochemical oxidants (Hydrocarbons)
North Coast Intrastate	(e)	(e)	(e)
San Francisco Bay Intrastate	(e)	May 31, 1977	May 31, 1977
North Central Coast Intrastate	(e)	(e)	(e)
South Central Coast Intrastate	(e)	(e)	(e)
Metropolitan Los Angeles Intrastate	May 31, 1977	May 31, 1977	May 31, 1977
San Diego Intrastate	(e)	May 31, 1977	May 31, 1977
Northeast Plateau Intrastate	(c)	(e)	(e)
Sacramento Valley Intrastate	(e)	May 31, 1977	May 31, 1977
San Joaquin Valley Intrastate	(e)	May 31, 1977	May 31, 1977
Great Basin Valley Intrastate	(e)	(e)	(e)
Southeast Desert Intrastate	(e)	May 31, 1977	May 31, 1977

§ 52.239 [Reserved]

4. Section 52.239 is revoked and reserved.

5. Sections 52.241 through 52.266 are added to read as follows:

§ 52.241 Gasoline limitations.

(a) Definitions:

(1) "Distributor" means any person or entity that transports, stores, or causes the transportation or storage of gasoline between any refinery and any retail outlet.

(2) "Retail outlet" means any establishment at which gasoline is sold or offered for sale to the public, or introduced into any vehicle.

(b) This regulation is applicable in the Metropolitan Los Angeles, San Francisco Bay Area, Sacramento Valley, San Joaquin Valley, and San Diego Intrastate Air Quality Control Regions (the "Regions") to all distributors of gasoline to any retail outlet in the Regions, and to the owners and operators of all retail outlets in the Regions.

(c) If the Administrator determines, on the basis of air quality monitoring in the Regions, that the national ambient air quality standards for carbon monoxide and photochemical oxidants will not be attained in a Region by May 31, 1977, the Administrator shall implement a program, to be effective no later than May 31, 1977, limiting the total gallonage of gasoline delivered to retail outlets in that Region to that amount which, when combusted, will not result in the ambient air quality standards being exceeded.

(d) All distributors to which this section applies shall provide the Administrator with a detailed annual accounting of the amount of gasoline delivered to each retail outlet in the Regions for calendar year 1976 and for each calendar year during which the gasoline limitation program is in effect. The owner or operator of each retail outlet to which this section applies shall provide the Administrator with a detailed accounting of gasoline received from each distributor, the total amount of gasoline sold during the year, and the amount of gasoline on hand at the beginning and end of the year, for each year during which the gasoline limitation program is in effect. All accountings required by this section shall be provided no later than 90 days after the end of the applicable year. The Administrator may require any other report that he may deem necessary for the implementation of this section.

§ 52.242 Inspection and maintenance program.

(a) Definitions:

(1) "Inspection and maintenance program" means a program to reduce emissions from in-use vehicles through identifying vehicles which need emission control-related maintenance and requiring that maintenance be performed.

(2) "Light-duty vehicle" means any gasoline-powered motor vehicle rated at 6,000 pounds GVW or less.

(3) All other terms used in this section that are defined in Appendix N to Part 51 of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (hereinafter referred to as the Regions).

(c) The State of California shall establish an inspection and maintenance program applicable to all light-duty vehicles registered in the Regions that operate on streets or highways over which it has ownership or control. No later than June 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The State may exempt any class or category of vehicles which it finds are rarely used on public streets and highways (such as classic or antique vehicles). The regulations shall include:

(1) Provisions for inspection of all light-duty motor vehicles at periodic intervals no more than one year apart by means of a loaded test.

(2) Provisions for inspection failure criteria consistent with the emission reductions claimed in the plan for the strategy. These emission reductions are 15 percent for hydrocarbons and 12 percent for carbon monoxide. These criteria are estimated to include failure of 50 percent of the vehicles in the first inspection cycle.

(3) Provisions to ensure that failed vehicles receive within two weeks, the maintenance necessary to achieve compliance with the inspection standards. This shall include sanctions against noncomplying individual owners and repair facilities, retest of failed vehicles following maintenance, a certification program to ensure that repair facilities performing the required maintenance have the necessary equipment, parts, and knowledgeable operators to perform the tasks satisfactorily, and such other measures as may be necessary or appropriate.

(4) A program of enforcement to ensure that, following inspection or maintenance, vehicles are not intentionally readjusted or modified in such a way as would cause them no longer to comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging. This program shall include appropriate penalties for violation.

(5) Provisions for beginning the first inspection cycle on October 1, 1975, and completing it by September 30, 1976.

(6) Designation of an agency or agencies responsible for conducting, overseeing, and enforcing the inspection and maintenance program.

(d) After September 30, 1976, the State shall not register or allow to operate on its streets or highways any light-duty vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section. This shall not apply to the initial registration of a new motor vehicle.

(e) After September 30, 1976, no owner of a light-duty vehicle shall operate or allow the operation of such vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section. This shall not apply to the initial registration of a new vehicle.

(f) The State of California shall submit no later than February 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce an inspection and maintenance program pursuant to paragraph (c) of this section, including the text of needed statutory proposals and needed regulations that it will propose for adoption. The compliance schedule shall also include:

(1) The date by which the State will recommend any needed legislation to the State legislature.

(2) The date by which necessary equipment will be ordered.

(3) A signed statement from the Governor and State Treasurer identifying the sources and amount of funds for the program. If funds cannot legally be obligated under existing statutory authority, the text of needed legislation shall be submitted.

§ 52.243 Motorcycle limitation.

(a) Definitions:

(1) "Motorcycle" means any self-propelled, two- or three-wheeled motor ve-

hicle capable of carrying one or more persons.

(b) This section is applicable in the San Diego, Los Angeles, San Francisco Bay Area, San Joaquin Valley, and Sacramento Valley Air Quality Control Regions (the "Region").

(c) As of January 1, 1976, the State of California shall prohibit the operation of motorcycles in each Region between the hours of 6 a.m. and 8 p.m. during the months of May, June, July, August, and September.

(d) The restrictions set forth in paragraph (c) of this section shall be of no force and effect during the period from January 1, 1976, to December 31, 1978, if the Administrator establishes legally valid and binding emission standards applicable to all new motorcycles meeting the light-duty vehicle definition of the Clean Air Act, sold in 1976 and later model years, and such standards require emission levels representing at least a 50 percent reduction in present emission levels of hydrocarbons emitted by 2-stroke motorcycles and a significant reduction in emissions of carbon monoxide from present levels emitted by both 2- and 4-stroke motorcycles.

(e) The restrictions set forth in paragraph (c) of this section shall be of no force and effect on and after January 1, 1979, if the Administrator establishes legally valid and binding emission standards for new motorcycles sold in the 1979 and later model years, and such standards receive motorcycles manufactured during the 1979 and later model years to achieve at least the same degree of emission control of hydrocarbons and carbon monoxide as is required for 1976 and later model year light-duty vehicles.

(f) No later than July 1, 1975, and July 1, 1978, respectively (unless the applicable exemptions under paragraphs (d) or (e) of this section have become available), the State shall submit a detailed compliance schedule showing the steps it will take to implement and enforce these requirements, including:

(1) The text of needed statutory proposals and needed regulations which it will propose for adoption.

(2) A date by which the State will adopt procedures (or submit evidence that they are in existence) necessary to restrict the operation of motorcycles as required above. Such date shall be no later than December 1, 1975, and December 1, 1978, respectively.

§ 52.244 Oxidizing catalyst retrofit.

(a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of a vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) "Light-duty vehicle" means any gasoline-powered motor vehicle rated at 6,000 pounds GVW or less.

(3) All other terms used in this section that are defined in Part 51, Appendix N, of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the San Diego, San Francisco Bay Area, San Joaquin Valley, Sacramento Valley, and Metropolitan Los Angeles Intrastate Air Quality Control Regions.

(c) The State of California shall establish a retrofit program to ensure that on or before May 31, 1977, all gasoline-powered, light-duty motor vehicles of model years 1966 through 1974, which are subject under currently existing legal requirements to registration in the area defined in paragraph (b) of this section, and which are capable of operating on unleaded gasoline having a research octane number (RON) of 91 or lower, are equipped with an appropriate oxidizing catalyst retrofit device. No later than September 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use in motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of paragraph (c) (3) of this section are enforced.

(3) A provision that, starting no later than December 1, 1975, the State of California shall commence retrofitting oxidizing catalysts to those light-duty motor vehicles able to operate properly and safely on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedures for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and that they have an adequate supply of retrofit components.

(d) After May 31, 1977, the State shall not register or allow to operate on public streets or highways any light-duty, gasoline-powered vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(f) The State of California shall submit, no later than April 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, and the text of needed statutory proposals and needed regulations that it will propose for adoption. The compliance schedule shall include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than January 1, 1975.

§ 52.245 Control of oxides of nitrogen, hydrocarbon, and carbon monoxide emissins from in-use vehicles.

(a) The State of California retrofit program, authorized under section 39176 of the State of California Health and Safety Code and established by the California Air Resources Board for the purpose of controlling oxides of nitrogen, hydrocarbon, and carbon monoxide emissions from model year 1955 through 1965 light-duty motor vehicles, shall be extended to the San Joaquin Valley and Sacramento Valley Intrastate Air Quality Control Regions (the "Regions").

(b) Beginning March 31, 1974, the State of California shall commence the operation of this program in the Regions.

§ 52.246 Control of dry cleaning solvent vapor losses.

(a) For the purpose of this section, "dry cleaning operation" means that process by which an organic solvent is used in the commercial cleaning of garments and other fabric materials.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions.

(c) Any dry cleaning establishment that uses solvents containing 4 percent or more by volume of any reactive organic material listed under paragraphs (k) (1), (2), and (3) of § 52.254 except perchloroethylene or any saturated halogenated hydrocarbon shall reduce the emissions of the discharged organics by 90 percent by use of activated carbon adsorption or other appropriate means; not later than January 1, 1975.

(d) If incineration is used as a control technique, 90 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide.

§ 52.247 Definitions for parking management regulations.

(a) For purposes of §§ 52.248, 52.249, 52.250, and 52.251:

(1) "Parking facility" (also called "facility") means any facility, building, structure, lot, or portion thereof used primarily for temporary storage of motor vehicles.

(2) "Parking space" means any area whatsoever customarily used for the temporary storage of a motor vehicle that is not being held for the sole purpose of original sale, resale, or repair.

(3) "Employer" means any person or entity that employs 50 or more persons. "Employee parking space" means any parking space reserved or provided by any employer for the primary use of his employees.

(4) "Residential parking space" means any parking space used primarily for the parking of vehicles of persons residing within less than half a mile of the space.

(5) "Commercial parking space" means any parking space in which the parking of a single motor vehicle is permitted for a fee. It includes on-street parking governed by parking meters, and excludes employee and residential parking spaces

(6) "Free parking space" means any parking space in which the parking of a single motor vehicle without a fee is per-

mitted or encouraged by the person having control of such space, whether for the purpose of encouraging patronage of commercial establishment(s) or otherwise. It includes free on-street parking and free parking on vacant lots, and excludes employee and residential parking spaces. All parking spaces are either commercial, employee, residential, or free parking spaces.

§ 52.248 Surcharge on commercial parking spaces.

(a) This section is applicable in the Los Angeles, San Diego, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(b) A surcharge of the amount designated in paragraph (c) of this section shall be applied to all contracts or other agreements whereby a vehicle is parked for a fee in any commercial parking space located in the areas described in paragraph (a) of this section. Such surcharge shall be collected by the county or municipality having regulatory jurisdiction over the particular commercial parking space involved or by its designated agent. The surcharge fees minus collection expenses, but in any event no less than 50 percent of the gross proceeds, shall be utilized for EPA approved or designated mass transit improvements within the Region in which the surcharge is collected. The State of California, or its designated agent, if it wishes, may collect such surcharge instead of the relevant local governmental entity. The surcharge shall be calculated on an hourly basis and applied to all parking between the hours of 7:00 a.m. and 7:00 p.m. on all days other than Saturdays, Sundays, and legal holidays. However, the maximum daily surcharge shall not exceed ten times the hourly surcharge rate, and if a vehicle is parked for more than one day, only the surcharge for the first day shall be collected. Exemptions from this surcharge may be given to handicapped persons and disabled veterans.

(c) The surcharge shall be implemented on the following schedule:

Effective date	Hourly rate	Area of applicability
July 1, 1974	$0.10	All cities with population greater than 100,000 in the Regions.
July 1, 1975	.20	All cities with population greater than 50,000 in the Regions.
July 1, 1976	.25	Regions as a whole.

(d) Each person or entity owning or operating any commercial parking space subject to this section, and each local government entity on which obligations are imposed by this section shall, at least 3 months before the effective date of any surcharge provided by this section, submit to the Administrator a detailed compliance schedule showing the steps it will take to collect the said surcharge. The compliance schedule shall specify steps to be taken to keep a permanent record of the number of vehicle hours of parking for which the facility is used each day that can be compared with the revenues collected, and, in the case of governmental entities responsible for collecting such fees, shall also detail a system of spot checks or similar enforcement measures designed to assure that owners and operators of commercial parking spaces are complying with the requirements of this section, the exact manner in which the revenues so collected will be used to promote mass transit, and a documentation of the surcharge collection expenses incurred.

(e) Parking spaces or facilities that are used exclusively to service mass transit (for example, park-and-ride facilities) shall be exempt from the provisions of this section, but a request for exemption must be made to the Administrator and approved by him.

§ 52.249 Surcharge on free parking spaces.

(a) This section is applicable in the Metropolitan Los Angeles, San Diego, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(b) Any owner or operator of more than five free parking spaces shall be subject to a regulatory fee in the amount set forth in paragraph (c) of this section. Such surcharge shall be collected by the county or municipality having regulatory jurisdiction over the particular free parking space involved, or its designated agent, and the surcharge fees minus collection expenses, but in any event no less than 50 percent of the gross proceeds shall be utilized for EPA approved or designated mass transit improvements within the Region in which the surcharge was collected. The State of California, or its designated agent, if it wishes, may collect the surcharge instead of the relevant local government. The surcharge shall be assessed annually each July 1 on the number of free parking spaces in existence at that date. Spaces temporarily removed for the purpose of avoiding the surcharge shall also be assessed.

However, to the extent that any person subject to a surcharge under this section elects to make payments to promote mass transit or carpooling in a manner satisfactory both to the Administrator and the collecting agency, the amount of the surcharge shall be abated. For example, a shopping center might institute a Dial-a-Ride service.

(c) The surcharge shall be implemented on the following schedule:

Effective date	Yearly amount per parking space	Area of applicability
July 1, 1974	$180	All cities with population greater than 100,000 in the Regions.
July 1, 1975	360	All cities with population greater than 50,000 in the Regions.
July 1, 1976	450	Regions as a whole.

The amount of the fee was determined by calculating what the annual proceeds of the surcharge imposed by § 52.248 of this subpart on a commercial parking space would be assuming a 250-day year and 60 percent average occupancy during the days on which the fee was collected.

(d) Each person or entity owning or operating any free parking space subject to this section shall, at least 5 months before the effective date of any surcharge provided by this section, submit to the Administrator an exact accounting of the number and location of such spaces under its ownership or control. Each local government entity on which obligations are imposed by this section shall, at least 3 months before the effective date of any surcharge provided by this section, submit to the Administrator a detailed compliance schedule showing the steps it will take to assess the accuracy of and correct any omissions in the accounts submitted by owners or operators subject to this section, the steps to collect the surcharge provided by this section, the exact manner in which the revenues so collected will be used to promote mass transit, and a documentation of the surcharge collection expenses incurred.

(e) Parking spaces or facilities that are used exclusively for serving mass transit (for example, park-and-ride facilities) shall be exempt from the provisions of this section, but a request for such exemption must be made to the Administrator and approved by him.

§ 52.250 Employers provision for mass transit priority incentives.

(a) Definitions:

(1) "Carpool" means a vehicle containing two or more persons.

(2) "Commercial rate" means the average daily rate charged by the three operators of parking facilities containing 100 or more commercial parking spaces that are closest in location to any employee parking space affected by this section.

(b) This section is applicable in the Metropolitan Los Angeles, San Francisco Bay Area, and San Diego Intrastate Air Quality Control Regions: in the Stanislaus, Fresno, San Joaquin, and Kern County portions of the San Joaquin Valley Intrastate Air Quality Control Region; and in the Sacramento, Yolo, El Dorado, and Placer County portions of the Sacramento Valley Air Quality Control Region (the "Regions").

(c) Each employer in the areas listed below maintaining more than the number of employee parking spaces specified, shall, commencing on the date listed, charge no less than the rate shown in the following table for the use of any such employee parking space by employees driving to work and not traveling in carpools:

EMPLOYER PARKING RATES

Employers (classified by number of employee parking spaces maintained)	Effective date	Total rate equals commercial rate (CR) plus—	Area of applicability
700	July 1, 1974	$1.00	All areas.
70	July 1, 1974	1.00	All cities over 100,000 in the Los Angeles, San Diego, and San Francisco Regions.
700	July 1, 1975	2.00	All areas.
70	July 1, 1975	2.00	All cities over 50,000 in the Los Angeles, San Diego, and San Francisco Regions.
70	July 1, 1975	1.00	All areas other than cities over 50,000.
700	July 1, 1976	2.50	All areas.
70	July 1, 1976	2.50	All areas in the Los Angeles, San Diego, and San Francisco Regions.
70	July 1, 1976	2.00	All areas in the Sacramento and San Joaquin Regions.
70	Mar. 31, 1977	2.50	All areas.

No employer may charge employees traveling to work in two-person carpools more than half the parking rate specified for non-carpool vehicles by this table. Carpools of three or more shall be allowed to park free of charge, and shall be allotted the spaces closest to the employment facility.

(d) Each employer subject to an obligation under paragraph (c) of this section, shall on the first date such an obligation becomes effective, also

(1) Institute a program of reimbursing employees for their expenses in utilizing mass transit facilities. However, such reimbursements need not exceed $200 per year per employee. Reimbursements shall be made in a form usable only as payment for the cost of such mass transit to be used by the employee only for commuting travel.

(2) Take all reasonable steps to encourage employees to commute to work by subscription or charter bus and similar privately owned mass transit facilities.

(3) Any funds collected under this section and remaining after overhead and payments to employees under paragraph (d) (1) and (2) of this section shall be disbursed to a State-designated, EPA-approved mass transit planning agency.

(e) Each employer subject to obligations under this section shall, at least 3 months prior to the effective date of any such obligation, submit to the Administrator a detailed compliance schedule setting forth the steps it will take to meet those requirements. The compliance schedule shall include a procedure for checking vehicles to determine whether or not they are carpools; for collecting the fees required to be collected hereunder; for disbursing any sums to individual employees in compensation for their use of mass transit; and for ensuring that such disbursements are used only for that purpose. It shall specify the steps that will be taken to determine the commercial parking rate for each affected employment facility and to encourage use of such private transit facilities as charter buses.

(f) As of the date that any obligations under this section become effective as to any employer, any zoning or land-use requirement specifying that an employer shall provide a given number of employee parking spaces for any given number of employees shall, as applied to such employer, be of no force or effect, except as specifically approved in writing by the Administrator.

§ 52.251 Management of parking supply.

(a) Definitions: All terms used in this section but not specifically defined below shall have the meaning given them in Part 51 of this chapter and this Part 52.

(1) "Vehicle trip" means a single movement by a motor vehicle that originates or terminates at a parking facility.

(2) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land or a building structure or portion thereof for use as a facility.

(3) "Modification" means any change, including enlargement, in the design, construction, capacity, or method of operation of a parking facility that increases or may increase the motor vehicle capacity of or the motor vehicle activity associated with such parking facility.

(4) "Commence" means to undertake a continuous program of on-site construction or modification.

(b) This regulation is applicable in the Metropolitan Los Angeles, San Diego, and San Francisco Bay Area Intrastate Air Quality Control Regions, in the Stanislaus, Fresno, San Joaquin, and Kern County portions of the San Joaquin Valley Intrastate Air Quality Control Region, and in the Sacramento, Yolo, El Dorado, and Placer County portions of the Sacramento Valley Intrastate Air Quality Control Region.

(c) The requirements of this section are applicable to the following parking facilities in the areas specified in paragraph (b) of this section, the construction or modification of which commenced after August 15, 1973.

(1) Any new parking facility with parking capacity for 50 or more motor vehicles.

(2) Any parking facility that will be modified to increase parking capacity by 50 or more motor vehicles.

(3) Any parking facility constructed or modified in increments which individually are not subject to review under this section, but which, when all such increments occurring since August 14, 1973, are added together, as a total would subject the facility to review under this section.

(d) No person shall commence construction or modification of any facility subject to this section without first obtaining written approval from the Administrator or any agency designated by him; provided that this paragraph shall not apply to any proposed parking facility for which a general construction contract was finally executed by all appropriate parties on or before August 15, 1973.

(e) No approval to construct or modify a facility shall be granted unless the applicant shows to the satisfaction of the Administrator or agency approved by the Administrator that:

(1) The design or operation of the facility will not cause a violation of the control strategy which is part of the applicable implementation plan, and will be consistent with the plan's VMT reduction goals, and

(2) The emissions resulting from the design or operation of the facility will not prevent or interfere with the attainment or maintenance of any national ambient air quality standard at any time within 10 years from the date of application. A permit will be granted in every case where the applicant makes a showing satisfactory to the Administrator that the spaces to be built will be used exclusively for serving mass transit (for example, as part of a park-and-ride system.)

(f) All applications for approval under this section shall include the following information:

(1) Name and address of the applicant.

(2) Location and description of the parking facility.

(3) A proposed construction schedule.

(4) The normal hours of operation of the facility and the enterprises and activities that it serves.

(5) The total motor vehicle capacity before and after the construction or modification of the facility.

(g) All applications under this section for new parking facilities with parking capacity for 250 or more vehicles, or for any modification which, either individually or together with other modifications since August 15, 1973, will increase capacity by that amount, shall, in addition to that information required by paragraph (f) of this section, include the following information unless the applicant has received a waiver from the provisions of this paragraph from the Administrator or agency approved by him:

(1) The number of people using or engaging in any enterprises or activities that the facility will serve on a daily basis and a peak hour basis.

(2) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projection shall include data concerning the availability of mass transit from such areas.

(3) An estimate of the average and peak hour vehicle trip generation rates,

before and after construction or modification of the facility.

(4) An estimate of the effect of the facility on traffic pattern and flow.

(5) An estimate of the effect of the facility on total VMT for the air quality control region.

(6) An analysis of the effect of the facility on site and regional air quality, including a showing that the facility will be compatible with the applicable implementation plan, and that the facility will not cause any national air quality standard to be exceeded within 10 years from date of application. The Administrator may prescribe a standardized screening technique to be utilized in analyzing the effect of the facility on ambient air quality.

(7) Additional information, plans, specifications, or documents required by the Administrator.

(h) Each application shall be signed by the owner or operator of the facility, whose signature shall constitute an agreement that the facility shall be operated in accordance with applicable rules, regulations, permit conditions, and the design submitted in the application.

(i) Within 30 days after receipt of an application, the Administrator or agency approved by him shall notify the public, by prominent advertisement in the Region affected, of the receipt of the application and the proposed action on it (whether approval, conditional approval, or denial), and shall invite public comment.

(1) The application, all submitted information, and the terms of the proposed action shall be made available to the public in a readily accessible place within the affected air quality region.

(2) Public comments submitted within 30 days of the date such information is made available shall be considered in making the final decision on the application.

(3) The Administrator or agency approved by him shall take final action (approval, conditional approval, or denial) on an application within 30 days after close of the public comment period.

(j) As an alternative to satisfying the requirements of paragraphs (d) through (i) of this section, any local jurisdiction or authority may submit to the Administrator a comprehensive parking management plan covering, at a minimum, the next 5 years. The plan should be submitted no later than March 31, 1974. The Administrator shall approve such plan if he finds that:

(1) The agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(2) The area over which the agency exercises the authority described in paragraph (j)(1) of this section is a logical unit for air pollution control planning purposes.

(3) The plan sets forth a complete description of where additional construction of parking facilities will be allowed under the plan, and where parking spaces will be eliminated, either by the operation of the measures set forth in §§ 52.248 through 52.250, or by further measures already adopted or to be adopted. The plan must state in detail the reasons for expecting any anticipated reduction in parking spaces, and must provide that no parking facility may legally be constructed in the area subject to the plan unless such construction is specifically authorized by the plan.

(4) The plan demonstrates that if its terms are carried out, air quality will improve at least as much as if all new parking facilities were subject to the requirements of paragraphs (d) through (i) of this section. If any increases in VMT would result under the proposed plan over and above the VMT figure that would result if the review system outlined in paragraphs (d) through (i) of this section were followed, the plan shall show by clear and convincing evidence any resulting impact on air quality to be insubstantial.

(5) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(k) In any area covered by a parking management plan approved under paragraph (j) of this section, no action to expand the number of spaces at parking facilities may be taken that is not explicitly provided for in the plan without a permit issued in accordance with the requirements of paragraphs (d) through (i) of this section.

§ 52.252 Control of degreasing operations.

(a) "Degreasing" means any operation using an organic solvent as a surface cleaning agent prior to fabricating, surface coating, electroplating, or any other process.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Regions.

(c) Any organic emissions discharged from degreasing operations must either be reduced by at least 85 percent, or the degreasing solvent must be classified as non-photochemically reactive as defined by paragraph (k) of § 52.254 not later than January 1, 1975. This regulation shall not be construed as lessening any emission control requirement specified under EPA approved regulations or § 52.254. Degreasing operations using perchloroethylene or saturated halogenated hydrocarbons shall be exempt from the requirements of this section.

§ 52.253 Metal surface coating thinner and reducer.

(a) All terms defined in § 52.254 are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, San Joaquin Valley, Sacramento Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(c) The composition of the organics in all metal surface coating thinners and reducers that are manufactured after January 1, 1975, and are used in the Regions, shall conform to paragraph (k) of § 52.254 so as to be defined as a non-photochemically reactive solvent.

(d) After July 1975, the composition of the organics in all metal surface coating thinners and reducers that are used in the Regions, shall conform to paragraph (k) of § 52.254 so as to be defined as a non-photochemically reactive solvent.

(e) If there is an inadequate supply of necessary solvent ingredients needed in the manufacture of metal surface coating thinners and reducers for the purpose of meeting the composition requirements of this section in the time constraint required by this section; then evidence of such a supply inadequacy must be presented to the Administrator by the manufacturers of the metal surface coating thinners and reducers, so that the Administrator may grant to the industry an appropriate implementation time extension for meeting the requirements of this section, if and as warranted by the evidence presented.

§ 52.254 Organic solvent usage.

(a) This section is applicable in the San Joaquin Valley, Sacramento Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(b) No person shall discharge into the atmosphere more than 15 pounds of organic materials in any 1 day or more than 3 pounds in any 1 hour from any article, machine, equipment, or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized in the presence of oxygen, unless said discharge has been reduced by at least 85 percent. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing continuous web, strip, or wire that emit organic materials in the course of using operations described in this section shall be collectively subject to compliance with this section.

(c) A person shall not discharge to the atmosphere more than 40 pounds of organic materials in any 1 day or more than 8 pounds in any 1 hour from any article, machine, equipment, or other contrivance used under conditions other than those described in paragraph (b) of this section for employing or applying any photochemically reactive solvent, as defined in paragraph (k) of this section, or material containing such photochemically reactive solvent, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air- or heated-drying of products for the first 12 hours after their removal from any article, machine, or other contrivance described in this section shall be included in determining compliance with this paragraph. Emissions resulting from baking, heat-curing, or heat-polymerizing as described in paragraph (b) of this section shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing a continuous web, strip, or wire that emit organic materials in the course of using operations de-

scribed in this section shall be collectively subject to compliance with this section.

(d) A person shall not, after August 31, 1976, discharge into the atmosphere more than 3,000 pounds of organic materials in any 1 day or more than 450 pounds in any 1 hour from any article, machine, equipment, or other contrivance in which any non-photochemically reactive organic solvent or any material containing such a solvent is employed or applied, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air- or heated-drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this section shall be included in determining compliance with this section. Emissions resulting from baking, heat-curing, or heat-polymerizing as described in paragraph (b) of this section shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing a continuous web, strip, or wire that emit organic materials in the course of using operations described in this section shall be collectively subject to compliance with this section.

(e) Emissions of organic materials to the atmosphere from the cleaning with photochemically reactive solvent, as defined in paragraph (k) of this section, of any article, machine, equipment, or other contrivance described in paragraphs (b), (c), or (d) of this section, shall be included with the other emissions of organic materials for determining compliance with this rule.

(f) Emissions of organic materials into the atmosphere required to be controlled by paragraphs (b), (c), or (d) of this section, shall be reduced by:

(1) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or

(2) Adsorption, or

(3) Processing in a manner determined by the Administrator to be not less effective than the methods outlined in paragraph (f) (1) or (2) of this section.

(g) A person incinerating, adsorbing, or otherwise processing organic materials pursuant to this section shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified in the authority to construct or permit to operate, or as specified by the Administrator, for indicating temperatures, pressures, rates of flow, or other operating conditions necessary to determine the degree and effectiveness of air pollution control.

(h) Any person using organic solvents or any materials containing organic solvents shall supply the Administrator upon request and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

(i) The provisions of this section shall not apply to:

(1) The manufacture of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.

(2) The use of equipment for which other requirements are specified by rules or which are exempted from air pollution control requirements by applicable rules affecting the storage of petroleum products, effluent oil-water separators, and the transfer of gasoline.

(3) The spraying or other employment of insecticides, pesticides, or herbicides.

(4) The employment, application, evaporation, or drying of saturated halogenated hydrocarbons or perchloroethylene.

(5) The use of any material in any article, machine, equipment, or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:

(i) The volatile content of such materials consists only of water and organic solids, and

(ii) The organic solvents comprise not more than 20 percent by volume of said volatile content, and

(iii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

This last stipulation applies only for those articles, machines, equipment, or contrivances that are constructed or modified after the effective date of this section.

(6) The use of any material in any article, machine, equipment or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:

(i) The organic solvent content of such material does not exceed 30 percent by volume of said material; this to be effective until January 1, 1977. After January 1, 1977, the organic solvent content of such material must not exceed 20 percent by volume of said material.

(ii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame. This last stipulation applies only for those articles, machines, equipment, or contrivances that are constructed or modified after the effective date of this section.

(j) For the purposes of this section, organic solvents include diluents, thinners, and reducers and are defined as organic materials that are liquids at standard conditions and are used as dissolvers, viscosity reducers, or cleaning agents, except that such materials exhibiting a boiling point higher than 220° F at 0.5 millimeter mercury absolute pressure or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 220° F.

(k) For the purpose of this section, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

(1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cycloolefinic type of unsaturation; 5 percent;

(2) A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene, phenyl acetate, and methyl benzoate; 8 percent;

(3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

(l) For the purpose of this section, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, and ammonium carbonate.

(m) Architectural coatings and their use shall conform to the following requirements, on or before January 1, 1975:

(1) A person shall not sell or offer for sale or use in the areas in which this section applies, in containers of 1-quart capacity or larger, any architectural coating containing photochemically reactive solvent, as defined in paragraph (k) of this section.

(2) A person shall not employ, apply, evaporate, or dry in the areas in which this section applies, any architectural coating purchased in containers of 1-quart capacity or larger containing photochemically reactive solvent, as defined in paragraph (k) of this section.

(3) A person shall not thin or dilute any architectural coating with a photochemically reactive solvent, as defined in paragraph (k) of this section.

(4) For the purpose of this section, an architectural coating is defined as a coating used for residential or commercial buildings and their appurtenances, or for industrial buildings.

(n) A person shall not during any one day dispose of a total of more than 1.5 gallons of any photochemically reactive solvent as defined in paragraph (k) of this section, or of any material containing more than 1.5 gallons of any such photochemically reactive solvent by any means that will permit the evaporation of such solvent into the atmosphere.

(o) Compliance schedule. (1) Except where other final compliance dates are provided in this section, the owner or operator of any stationary source subject to this section shall comply with this section on or before March 31, 1974. In any event:

(i) Any owner or operator in compliance with this section on the effective date of this section shall certify such compliance to the Administrator no later

than 120 days following the effective date of this section.

(ii) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(p) Any owner or operator of a stationary source subject to paragraph (o) (1) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions in paragraph (o) (1) of this section as expeditiously as practicable but no later than July 31, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to: Submittal of a final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of onsite construction or installation of emission control equipment or process modification; completion of onsite construction or installation of emission control equipment or process modification and final compliance.

(q) Any owner or operator who submits a compliance schedule pursuant to this section shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

§ 52.255 Gasoline transfer vapor control.

(a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Metropolitan Los Angeles, Sacramento Valley, and San Joaquin Valley Intrastate Air Quality Control Regions.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight return line from the storage container to the delivery vessel and a system that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.

(2) If a "vapor-tight vapor return" system is used to meet the requirements of this section, the system shall be so constructed as to be readily adapted to retrofit with an adsorption system, refrigeration-condensation system, or equivalent vapor removal system, and so constructed as to anticipate compliance with § 52.256.

(3) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapors displaced from the delivery vessel during refilling.

(iii) Facilities that do not have more than a 20,000 gallons per day throughput and distribute less than 10 percent of daily volume to delivery vehicles that in turn service storage tanks that do not have a vapor return or balance system, will not be required to have a vapor recovery system in operation before January 1, 1977. Facilities that exclusively service delivery vehicles that in turn service storage tanks that do not have a required vapor return or balance system, will not be required to have a vapor recovery system.

(iv) Gasoline storage compartments of 1,000 gallons or less in gasoline delivery vehicles presently in use on the promulgation date of this regulation will not be required to be retrofitted with a vapor return system until January 1, 1977.

(d) The provisions of paragraph (c) of this section shall not apply to the following:

(1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry.

(2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this section.

(3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) Compliance schedule:

(1) February 1, 1974—Submit to the Administrator a final control plan, which describes at a minimum the steps that will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.

(2) May 1, 1974—Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(3) January 1, 1975—Initiate on-site construction or installation of emission control equipment.

(4) February 1, 1976—Complete on-site construction or installation of emission control equipment.

(5) March 1, 1976—Assure final compliance with the provisions of paragraph (c) of this section.

(6) Any owner or operator of sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(f) Paragraph (e) of this section shall not apply:

(1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by December 15, 1973. The Administrator may request whatever supporting information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after March 1, 1976. If promulgated by the Administrator, such schedule shall satisfy the requirements of this section for the affected source.

(g) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (e) of this section fails to satisfy the requirements of § 51.15 (b) and (c) of this chapter.

(h) Any gasoline-dispensing facility subject to this section that installs a storage tank after the effective date of this section shall comply with the requirements of paragraph (c) of this section by March 1, 1976 and prior to that date shall comply with paragraph (e) of this section as far as possible. Any facility subject to this section that installs a storage tank after March 1, 1976, shall comply with the requirements of paragraph (c) of this section at the time of installation.

§ 52.256 Control of evaporative losses from the filling of vehicular tanks.

(a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Metropolitan Los Angeles, Sacramento Valley, and San Joaquin Valley Intrastate Air Quality Control Regions.

(c) A person shall not transfer gasoline to an automotive fuel tank from a gasoline dispensing system unless the transfer is made through a fill nozzle designed to:

(1) Prevent discharge of hydrocarbon vapors to the atmosphere from either the vehicle filler neck or dispensing nozzle;

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered; and

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of

a vapor-tight vapor return line from the fill nozzle/filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, refrigeration-condensation system or its equivalent.

(e) Components of the systems required by paragraph (c) of § 52.255 can be used for compliance with paragraph (c) of this section.

(f) If it is demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of vehicle fill neck configuration, location, or other design features for a class of vehicles, the provisions of this paragraph shall not apply to such vehicles. However, in no case shall such configuration exempt any gasoline dispensing facility from installing and using in the most effective manner a system required by paragraph (c) of this section.

(g) Compliance schedule:

(1) February 1, 1974—Submit to the Administrator a final control plan, which describes at a minimum the steps that will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.

(2) June 1, 1974—Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(3) January 1, 1975—Initiate on-site construction or installation of emission control equipment. Compliance with the requirements of paragraph (c) of this section shall be as soon as practicable, but no later than specified in paragraph (g) (4) and (5) of this section.

(4) May 1, 1977—Complete on-site construction or installation of emission control equipment or process modification.

(5) May 31, 1977—Assure final compliance with the provisions of paragraph (c) of this section.

(6) Any owner or operator of sources subject to the compliance schedule in this paragraph (g) shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(h) Paragraph (g) of this section shall not apply:

(1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by December 15, 1973. The Administrator may request whatever supporting information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1977. If promulgated by the Administrator, such schedule shall satisfy the requirements of this section for the affected source.

(i) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (g) of this section fails to satisfy the requirements of § 51.15 (b) and (c) of this chapter.

(j) Any gasoline dispensing facility subject to this section that installs a gasoline dispensing system after the effective date of this section shall comply with the requirements of paragraphs (c) of this section by May 31, 1977, and prior to that date shall comply with paragraph (g) of this section as far as possible. Any facility subject to this section that installs a gasoline dispensing system after May 31, 1977, shall comply with the requirements of paragraph (c) of this section at the time of installation.

§ 52.257 Computer carpool matching.

(a) "Carpool matching" means assembling lists of commuters with similar daily travel patterns and providing a mechanism by which persons on such lists may be put in contact with each other for the purpose of forming carpools.

(b) This section is applicable in the Metropolitan Los Angeles, San Francisco Bay Area, and San Diego Air Quality Control Regions; in the Fresno, San Joaquin, Stanislaus, and Kern counties of the San Joaquin Valley Air Quality Control Region; and in the Sacramento, Placer, Yolo, and El Dorado counties of the Sacramento Valley Intrastate Air Quality Control Region (the "Regions").

(c) The State of California shall, unless exempted by the Administrator on the basis of a finding that equivalent service is being or will be provided by some other public or private entity, establish on or before January 1, 1975, a computer-aided carpool matching system that is conveniently available to the general public and to all employees of businesses within the Regions having more than 100 employees who operate light-duty vehicles on streets and highways over which the State of California has ownership or control. In the Los Angeles Region, however, the system need only, by January 1, 1975, cover employees in Los Angeles County and other cities in the Region having populations greater than 50,000, but it must be expanded to its full required scope by May 31, 1975.

(d) No later than July 1, 1974, the State of California shall furnish the Administrator with separate compliance schedules (including any necessary draft or adopted regulations) for implementing the requirements of paragraph (c) of this section in each of the Regions. The compliance schedule shall include:

(1) A method of collecting information that will include the following as a minimum:

(i) Provisions for each affected employee to receive an application form with a cover letter describing the matching program;

(ii) Provision on each application for applicant identification of time, origin, and destination, and the applicant's desire to ride only, drive only, or share driving;

(iii) A computer method of matching information that will have provisions for locating each applicant's origin and destination within the relevant Region, matching applicants with similar origins and destinations and travel schedules, and enabling the persons so matched to make contact with each other at the request of any one of them;

(iv) A method of providing continuing service such that the matched lists of all applicants are retained and made available for use by new applicants, application forms are currently available, and the master lists are periodically updated to remove applicants who no longer meet the governing criteria and add new applicants who do;

(v) An agency or agencies responsible for operating, overseeing, and maintaining the computer carpool matching system.

(e) No later than September 31, 1974, the State of California shall submit to the Administrator validly adopted regulations establishing the program outlined in each such compliance schedule.

(f) The State of California shall, in conjunction with the employers listed below, establish pilot programs for each region specified to assist it in developing the full-scale carpooling systems required by paragraph (c) of this section:

(1) In the San Diego Region—U.S. Navy Underwater Systems Center and the U.S. Navy Electronics Laboratory.

(2) In the San Francisco Region—U.S. Naval Base at Treasure Island, Alameda U.S. Naval Air Station, Presidio of the U.S. Army, and U.S. Naval Air Station at Moffet Field.

(3) In the Sacramento Valley Region—the McClellan Air Force Base, Sacramento.

(4) In the San Joaquin Valley Region—the Internal Revenue Service, Butler and Willow Avenues, Fresno.

(5) In the Los Angeles Region—the State shall cooperate with the City of Los Angeles to establish a pilot program for all employees in the Los Angeles central business district.

(g) The pilot programs listed in paragraph (f) of this section shall be implemented on the following schedule:

(1) On or before December 31, 1973, each employer or other entity subject to obligations under paragraph (f) of this section shall, together with the State of California, submit to the Administrator a compliance schedule conforming to the substantive requirements of paragraph (d) (1) of this section.

(2) No later than March 31, 1974, the pilot program shall begin operation.

§ 52.258 Mass transit priority—exclusive bus use.

(a) This regulation is applicable in the San Diego Intrastate Air Quality Control Region.

(b) On or before October 30, 1974, the City of San Diego shall convert all lanes of Broadway, from Kettner Boulevard to 14th Street, in the City of San Diego, to the exclusive use of buses.

(c) On or before March 31, 1974, the City of San Diego shall submit to the Administrator a detailed compliance schedule showing the steps it will take to convert Broadway to the exclusive use of buses. The compliance schedule shall specify measures to prevent the use of Broadway by non-buses and shall provide for the establishment of a synchronized signal system to maintain traffic speed.

(d) No later than June 1, 1975, the City of San Diego shall submit to the Administrator a detailed compliance schedule in the form specified in paragraph (c) of this section for the conversion to the exclusive use of buses of a significant additional number of miles of street (based on studies available to the Administrator) unless other measures deemed equivalent by the Administrator are submitted. No later than January 31, 1976, the City of San Diego shall put the program so outlined into effect.

(e) On or before October 30, 1974, the State of California shall begin to provide preferential traffic treatment for buses operating between the eastern terminus of the Broadway exclusive bus route established under paragraph (c) of this section and the entrances to State Highway 163.

(f) On or before March 31, 1974, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the required system of preferential treatment. This schedule may provide for the conversion of selected streets to the exclusive use of such buses, for the establishment of bus lanes, for metering of all other traffic using streets set aside for priority use by buses, or for any other such system acceptable to the Administrator.

§ 52.259 Ramp metering and preferential bus/carpool lanes.

(a) "Carpool" means a vehicle containing three or more persons.

(b) This regulation is applicable in the San Diego Intrastate Air Quality Control Region.

(c) On or before June 30, 1974, the State of California shall institute a program to grant preferential treatment to buses and carpools using the following sections of road:

(1) California State Highway 125 from Interstate 8 to the junction with California State Highway 94; and

(2) California State Highway 94 from the junction with California State Highway 125 to the junction with Interstate Freeway 5.

(d) On or before December 31, 1973, the State of California shall submit to the Administrator a detailed compliance schedule detailing the steps it will take to establish the preferential treatment system. The program shall include:

(1) A system of ramp metering designed to prevent the entrance of vehicles other than buses and carpools onto the designated road segments at any time when their entrance would have the effect of reducing the average speed at which buses and carpools travel. Such metering shall be established on each access ramp serving the designated highway segments provided that any given ramp may be exempted from this requirement if the State of California makes a showing satisfactory to the Administrator that the effect on average bus and carpool speed of installing such metering would be insubstantial.

(2) A system of bypass lanes designed to allow buses and carpools to avoid congestion or restrictions caused by the metering system described in paragraph (d)(1) of this section.

(3) A system of enforcement containing appropriate penalties for other vehicles to ensure that the bypass lanes are used only by buses and carpools.

(e) No later than September 30, 1975, the State of California shall implement a further system of preferential treatment for buses and carpools. Unless other measures deemed equivalent by the Administrator are submitted, this program shall at a minimum provide for the significant expansion based on studies to be designated by the Administrator of both the bus/carpool lane and the ramp metering systems.

(f) No later than March 30, 1975, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the preferential treatment system required under paragraph (e) of this section.

§ 52.260 Organic solvent usage. (Federal regulation adding to and replacing parts of Rule 66 of San Diego County)

(a) This section is applicable in that portion of San Diego County contained within the San Diego Intrastate Air Quality Control Region. This section is effective as of January 1, 1975.

(b) Rule 66 of San Diego County as contained in the local air pollution control district regulations for the San Diego County is hereby incorporated by reference in this plan and is amended by replacing subparagraph (1)(5), and adding in place thereof subparagraphs (5), (6), and (7). The amendment is as follows:

(5) The use of any material, in any article, machine, equipment, or other contrivance described in sections (a), (b), (c), or (e), if:

(i) The volatile content of such material consists only of water and organic solvents, and

(ii) The organic solvents comprise not more than 20 percent of volume of said bulk content, and

(iii) The volatile content is not photochemically reactive as defined in section (n), and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame. This requirement is to be effective only for those articles, machines, equipment or contrivances covered by this regulation, and that are constructed or modified after the effective date of this regulation.

(6) The use of any material in any article, machine, equipment, or other contrivance described in sections (a), (b), (c), or (e) if:

(i) The organic solvent content of such material does not exceed 30 percent by volume of said material: This is to be effective until January 1, 1977. After such date the organic solvent content of such material must not exceed 20 percent by volume.

(ii) The volatile content is not photochemically reactive as defined in section (n), and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame. This requirement is to be effective only for those articles, machines, equipment, or contrivances that are constructed or modified after the effective date of this regulation.

(7) A person shall not during any one day dispose of a total of more than 1.5 gallons of any photochemically reactive solvent, as defined in paragraph (n) of this rule, or of any such photochemically reactive solvent, by any means that will permit the evaporation of such solvent into the atmosphere.

§ 52.261 Preferential bus/carpool lanes, San Francisco Bay Area.

(a) Definitions:

(1) "Bus/carpool lane" means a lane on a street or highway open only to buses (or buses and carpools), whether constructed especially for that purpose or converted from existing lanes.

(2) "Carpool" means a vehicle containing three or more persons.

(b) This regulation is applicable in the San Francisco Bay Area Instrastate Air Quality Control Region (the "Region").

(c) On or before May 1, 1974, the State of California, through the State Department of Transportation or through other agencies to which legal responsibility may have been delegated, shall establish upon at least three major highways having three or more lanes running in each direction, a system of bus/carpool lanes totalling not less than 45 miles running each morning and evening during the hours specified in paragraph (d)(5) of this section in the direction of maximum traffic flow.

(d) On or before December 31, 1973, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the system of bus/carpool lanes required by paragraph (c) of this section, with each schedule to include the following:

(1) Each street or highway that will have bus/carpool lanes must be identified with a schedule for the establishment of the lanes.

(2) Bus/carpool lanes must be prominently indicated by overhead signs at appropriate intervals and at each intersection of entry ramps.

(3) Bus/carpool lanes must be prominently indicated by distinctive painted, pylon, or physical barriers.

(4) Vehicles legally using the bus/carpool lanes shall have the right of way when crossing other portions of the road to enter or leave such lanes.

(5) The bus/carpool lanes required hereunder may be either concurrent flow or contraflow and, at a minimum, shall operate from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m. each weekday.

(e) On or before May 31, 1975, the State of California shall implement a further bus/carpool lane program under which the total mileage of bus/carpool lanes required by paragraph (c) of this section shall, at a minimum, be doubled.

On or before December 31, 1974, the State of California shall submit to the Administrator a detailed compliance schedule in the form specified by paragraph (d) of this section, indicating the measures it will take to establish this further program.

§ 52.262 Submittal of studies—San Francisco Bay Area.

(a) The State of California shall submit to the Administrator by December 31, 1973, a status report on all "corridor issues" presented in the San Francisco Metropolitan Transportation Commission Report of June 27, 1973. This status report shall include, but not necessarily be limited to:

(1) A complete description of the particular corridor issue study.

(2) The date of completion of the study.

(3) The total person-hours necessary for the study.

(4) The relevance of the study to automotive emission reductions.

(5) The status of the study as of December 31, 1973.

(6) The Administrator will evaluate this status report and determine if greater Federal participation is required for either resolution of the study conclusions or implementation of the study's recommendations.

§ 52.263 Priority treatment for buses and carpools—Los Angeles Region.

(a) Definitions:

(1) "Carpool" means a vehicle containing three or more persons.

(2) "Bus/carpool lane" means a lane on a street or highway open only to buses (or to buses and carpools), whether constructed especially for that purpose or converted from existing lanes.

(3) "Preferential treatment" for any class of vehicles, means either the setting aside of one traffic lane for the exclusive use of such vehicles or other measures (for example, access metering or setting aside the entire street), which the Administrator finds would be at least equal in VMT reduction effect to the establishment of such a lane.

(b) This regulation is applicable in the Metropolitan Los Angeles Intrastate Air Quality Control Region (the "Region").

(c) On or before May 31, 1974, the State of California, through the State Department of Transportation or through other agencies to which legal authority has been delegated, shall establish the following system of bus/carpool lanes.

(1) Ventura/Hollywood Corridor—a concurrent flow exclusive bus/carpool lane from Topanga Canyon Boulevard, Woodland Hills (U.S. 101) to junction of the Hollywood Freeway, and contraflow on the Hollywood Freeway (U.S. 101) from the junction with Ventura Freeway in North Hollywood to Vermont Avenue, and bus preferential treatment on arterial surface streets from Vermont Avenue to the Los Angeles central business district (CBD).

(2) Harbor Freeway Corridor—contraflow on Harbor Freeway (California 11) from vicinity of Pacific Coast Highway, in Wilmington, to junction of Santa Monica Freeway (I–10), then by surface street preferential treatment to LA/CBD.

(3) Wilshire Corridor—surface street preferential bus treatment from vicinity of San Vincente Boulevard, to LA/CBD.

(4) San Bernardino Freeway Corridor—Bus/carpool lane, either contraflow or concurrent flow on San Bernardino Freeway from El Monte terminus of existing San Bernardino Freeway bus lane (I–10), to vicinity of Ontario Airport.

(5) Priority Treatment in CBD—provide preferential treatment in CBD on surface streets to connect Wilshire and San Bernardino corridors.

(d) On or before May 31, 1976, the State of California, through the State Department of Transportation or other agencies to which legal authority has been delegated, shall establish the following system of bus and bus/carpool lanes:

(1) Contraflow lane on the Golden State Freeway (I–5) from junction of Ventura Freeway (California 134) in Los Angeles to San Bernardino Freeway (I–10).

(2) Contraflow on Pasadena Freeway (California 11) from terminus in City of Pasadena to Hollywood Freeway (U.S. 101).

(3) Contraflow on Pomona Freeway from San Gabriel Freeway (I–605) to Santa Ana Freeway (I–5).

(4) Concurrent flow in San Diego Freeway (I–405) from Ventura Freeway (U.S. 101) in Sherman Oaks to Newport Freeway (California 55), Costa Mesa.

(5) Concurrent flow on Long Beach Freeway (California 7) from Santa Ana Freeway (I–5), City of Commerce to San Diego Freeway (I–405), Long Beach.

(6) Artesia Freeway (California 91) from Santa Ana Freeway (I–5) to Long Beach Freeway (California 7), Long Beach.

(e) Stage III will include specific routes in other portions of the Region.

(f) On or before December 31, 1973, the State of California shall submit to the Administrator a compliance schedule showing the steps it will take to establish the system of bus/carpool lanes required by paragraphs (c) and (d) of this section, with each schedule to include the following:

(1) A schedule for the establishment of the lanes. The schedule for the lanes required by paragraph (d) of this section shall provide for the first such lane to be set aside no later than June 1, 1974.

(2) Bus/carpool lanes must be prominently indicated by overhead signs at appropriate intervals and at each intersection of entry ramps.

(3) Bus/carpool lanes must be prominently indicated by distinctive painted, pylon, or physical barriers.

(4) Vehicles using a bus/carpool lane shall have the right of way when crossing other portions of the road to enter or leave such lanes.

(5) At a minimum, the bus/carpool lanes so set aside shall operate from 6:30 a.m. to 9:30 a.m. and from 3:30 to 6:30 a.m. each weekday.

(g) No deviation from the system of bus/carpool lanes required under paragraphs (c) and (d) of this section shall be permitted except upon application made by the State of California to the Administrator at the time of submittal of compliance schedules and approved by him, which application must contain a satisfactory designation of alternate routes for the establishment of such lanes.

§ 52.264 Mass transit priority strategy and planning.

(a) In this section and § 52.265, "Mass transit priority" means any preferential treatment that is given to mass transit operations and carpool versus the private single passenger automobile, in terms of access, rights-of-way, or any other appropriate measures.

(b) This section is applicable in the four county area of El Dorado, Placer, Sacramento, and Yolo contained in the Sacramento Valley Intrastate Air Quality Control Region.

(c) A study to determine the method or methods suitable for providing mass transit bus operation priority treatment on or in the vicinity of "J" Street in the City of Sacramento, shall be conducted by the State of California or a designated local or regional transporation authority. In addition to or as an adjunct to, the "J" Street study, the State of California or a designated local or regional transportation authority, shall investigate the present and near-term future (i.e. 1975 to 1977) need for priority treatment of mass transit buses in freeway and major thoroughfare operations in the four county area.

(1) The "J" Street portion of this study shall be completed and submitted to the Administrator by March 31, 1974, shall outline a suitable transit priority strategy and shall present in detail the implementation timetables and obstacles associated with the strategy, so that the Administrator can review implementation progress. No later than September 30, 1974, the "J" Street mass transit priority strategy must be implemented.

(2) The "freeway and major thoroughfare" portion of the study shall be completed by March 31, 1974. Estimated implementation timetables and obstacles associated with likely strategies shall be outlined so that the Administrator can review and determine the need and progress of implementation.

(3) With regard to both the "J Street" and the "freeway and major thoroughfare" sections of the study, general guidelines and criteria shall be established for determining the need for or appropriateness of providing mass transit priority in freeway, major thoroughfare, and local street operations, and a system of review for determining the need for implementing mass transit priority strategies shall be presented.

§ 52.265 Mass transit and transit priority planning.

(a) This section is applicable in the Standard Metropolitan Statistical Areas

(SMSA's) of the cities of Fresno, Stockton, Bakersfield, and Modesto in the San Joaquin Valley Intrastate Air Quality Control Region.

(b) A study being sponsored by the State of California Department of Transportation is presently in progress and is scheduled for completion in January of 1974. This study will indicate the potential for public transit usage in the Fresno City area. Using this study and other appropriate information as a guide, the State of California or a designated local or regional transportation authority shall, by May 31, 1974, submit to the Administrator recommended mass transit strategies, including mass transit priority strategies, that are potentially useful and feasible in the time frame of the present to 1975 and 1977. The recommendation shall present in detail the implementation milestone timetables and the obstacles associated with the strategies so that the Administrator can review and determine the need for and progress of implementation.

(c) Studies shall be conducted in the Stockton, Bakersfield, and Modesto SMSA's by the State of California or by designated local or regional transportation authorities. These studies shall be completed and submitted to the Administrator by September 30, 1974, and shall recommend mass transit strategies, including mass transit priority strategies, that are potentially useful and feasible in the time frame of the present to 1975 and 1977. The recommendation shall present in detail the implementation timetables and obstacles associated with the strategies, so that the Administrator can review all available information and determine the need for and progress of implementation.

§ 52.266 Monitoring transportation mode trends.

(a This section is applicable to the San Francisco Bay Area, Los Angeles, San Diego, San Joaquin Valley, and Sacramento Intrastate Air Quality Control Regions.

(b) The State of California or a designated agency approved by the Administrator shall monitor the actual per vehicle emissions reductions occurring as a result of the retrofit devices and inspection and maintenance programs required under §§ 52.242, 52.244, and 52.245, and the observed changes in vehicle miles traveled and average vehicle speeds as a result of traffic flow changes and reductions in vehicle use required under §§ 52.241 (if implemented), 52.243 (if implemented), 52.248, 52.249, 52.250, 52.251, 52.257, 52.258, 52.259, 52.261, 52.263, 52.264, and 52.265.

(c) No later than March 1, 1974, the State shall submit to the Administrator a detailed program demonstrating compliance with paragraph (b) of this section and in accordance with § 51.19(d) of this chapter. The program description shall include the following:

(1) The agency or agencies responsible for conducting, overseeing, and maintaining the monitoring program.

(2) The administrative process to be used.

(3) A description of the methods to be used to collect the emission reduction/VMT reduction/vehicle speed data, including a description of any modeling techniques to be employed.

(4) The funding requirements, including a signed statement from the Governor or State Treasurer or their respective designees identifying the source and amount of funds for the program.

(d) All data obtained by the monitoring program shall be included in the quarterly report submitted to the Administrator by the State, as required by § 51.7 of this chapter, in the format prescribed in Appendix M to part 51 of this chapter. The first quarterly report shall cover the period January 1–March 31, 1975.

[FR Doc.73-23577 Filed 11-9-73;8:45 am]